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# THE CITY OF EDMONTON



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## SUBMISSION TO THE SPECIAL COMMITTEE ON THE POWER COMMISSION ACT

AUGUST 26, 1968









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**A**

*LETTER OF HIS WORSHIP MAYOR DANTZER  
TO THE SPECIAL ADVISORY COMMITTEE*





August 26, 1968

Dr. G. L. Burton,

Chairman of the Special Advisory Committee  
on the Power Commission Act

Mr. W. McFarland

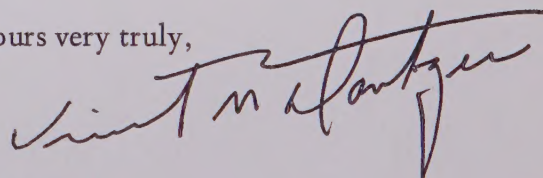
Mr. W. Major

Gentlemen:

The City of Edmonton is pleased to submit this brief to your Committee to assist it in its recommendations as to what would be in the public interest.

The City of Edmonton wishes to express its appreciation for the assistance and co-operation of its citizens and civic employees and of the cities of Lethbridge and Red Deer in the preparation and support of this brief.

Yours very truly,

A handwritten signature in dark ink, appearing to read "V. M. Dantzer", written in a cursive style.

V. M. Dantzer,  
Mayor

1957-1958

Mr. J. H. Brown

President of the Board of Directors  
The First National Bank

Mr. J. H. Brown

Dear Sir:

Enclosed is

The City of Richmond, Virginia, and the Board of Directors


in regard to the matter of the proposed merger of the City of Richmond

The City of Richmond, Virginia, and the Board of Directors

and the Board of Directors of the City of Richmond, Virginia

and the Board of Directors of the City of Richmond, Virginia

Very truly yours,



J. H. Brown  
President



POWER COMMITTEE OF THE CITY OF EDMONTON

Alfred E. J. M. M. M. M. M.

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Alfred E. J. M. M. M. M. M.

**B**

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COUNSEL AND CONSULTANTS

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Brown, Bower, Macdonald & Bower (Toronto)

D. Macdonald (Red Deer)

Kaiser, Roberts & Co. Incorporated (New York)





**POWER COMMITTEE OF THE CITY OF EDMONTON**

Alderman Dr. I. G. Dent (Chairman)

Alderman Mrs. U. M. Evans

Alderman N. Crawford

S. J. Hampton

W. D. Kirkland

C. Z. Monaghan

A. F. Macdonald, Q. C.

W. A. Williams (Secretary)

His Worship Mayor V. M. Dantzer (ex-officio)

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Proctor, Redfern, Bousfield & Bacon (Toronto)

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Kidder, Peabody & Co. Incorporated (New York)





**C**

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*TERMS OF REFERENCE  
OF SPECIAL ADVISORY COMMITTEE  
AND QUESTIONS POSED*





## TERMS OF REFERENCE OF THE SPECIAL ADVISORY COMMITTEE

By Order-in-Council of the Province of Alberta 2140/67 and 90/68, the terms of reference of the Special Advisory Committee were announced as follows:

“The Advisory Committee shall meet from time to time at the call of the chairman

- (a) To consider a draft revision of the present The Power Commission Act,
  - (b) To hear and consider representations and objections with respect to that draft by or on behalf of cities and other municipal corporations, electric utility companies and any provincial government departments,
  - (c) To consider the questions posed relative to the supply of power in areas included in areas annexed to a city of another municipality, and
  - (d) To consider other pertinent legislation (existing or proposed) to determine if there are any contradictions between such legislation and the draft revision of The Power Commission Act, and to recommend such changes in the legislation or the draft revision as appear advisable,
- and shall report its findings and recommendations to the Minister of Industry and Development.”



**MATTERS TO BE CONSIDERED BY THE  
SPECIAL ADVISORY COMMITTEE**

Dr. G. L. Burton, Chairman of the Special Advisory Committee, enclosed in his letter (April 11, 1968) to all interested parties a list of matters to be considered by the Special Advisory Committee in respect of the proposed Power Commission Act:

1. The application of regulatory legislation and procedures, the purposes, powers and duties of the respective regulatory bodies and the co-ordination of their functions.
2. Should uniform legislation apply to all utility owners with respect to all or any of the following:
  - (a) A uniform system of accounts.
  - (b) Procedures and valuation re
    - (i) Acquisition and disposition of property
    - (ii) Expropriation
  - (c) Determination of rate base rates of return and resulting rates.
3. The manner of granting, varying, cancelling and/or terminating over a period of years existing and future permissive orders.
4. The degree of control to be exercised by the Power Commission with respect to:
  - (a) Setting up and allocating to a utility owner designated areas including all or portions of a municipality.
  - (b) Regulating the construction of new generating and transmission facilities and the exchange, buying and selling of power among the utility owners.
  - (c) Should (a) or (b) be varied when a municipality is supplying power within its corporate limits.
5. Should the Power Commission be limited to a regulatory function exercising administrative and quasi-judicial powers only? This may necessitate the establishment of a separate



provincial corporation, if required, to be given the powers currently assigned to the Power Commission to generate and supply power or to take over existing utility systems.

6. Should there be a right of appeal from decisions of the Commission and, if so, are the grounds for such appeals adequate as presently set out in the draft legislation?

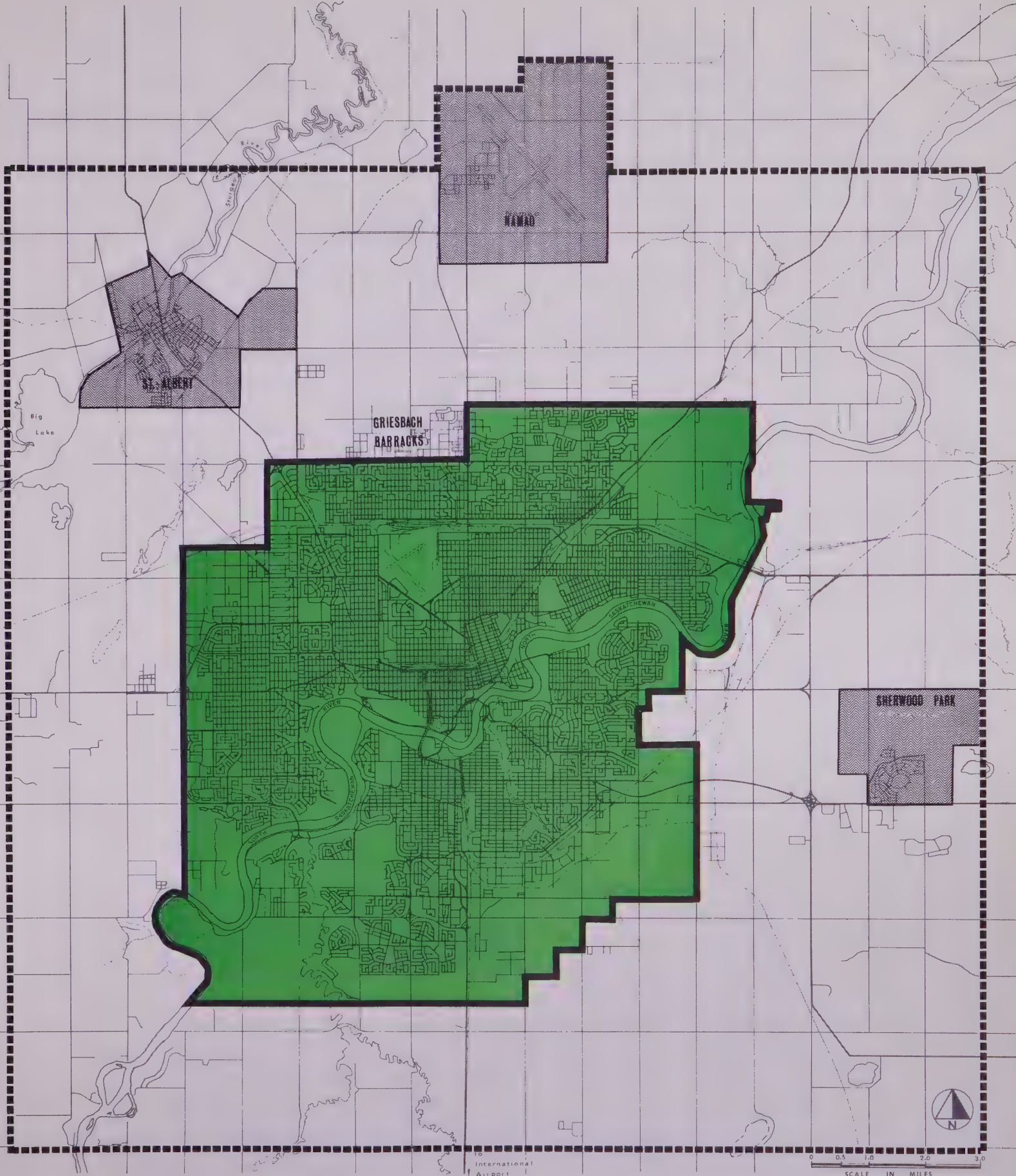
7. Should there be improved provisions for franchise renewals and if so, what?

8. The feasibility of permitting a municipality to levy a tax on power supplied by a private utility in an area annexed to the municipality as compensation for loss of revenue which the municipality might have received through the sale of power in that area.



*MAP OF THE CITY OF EDMONTON  
AND THE EDMONTON METROPOLITAN AREA  
ILLUSTRATING EDMONTON POWER BOUNDARIES*



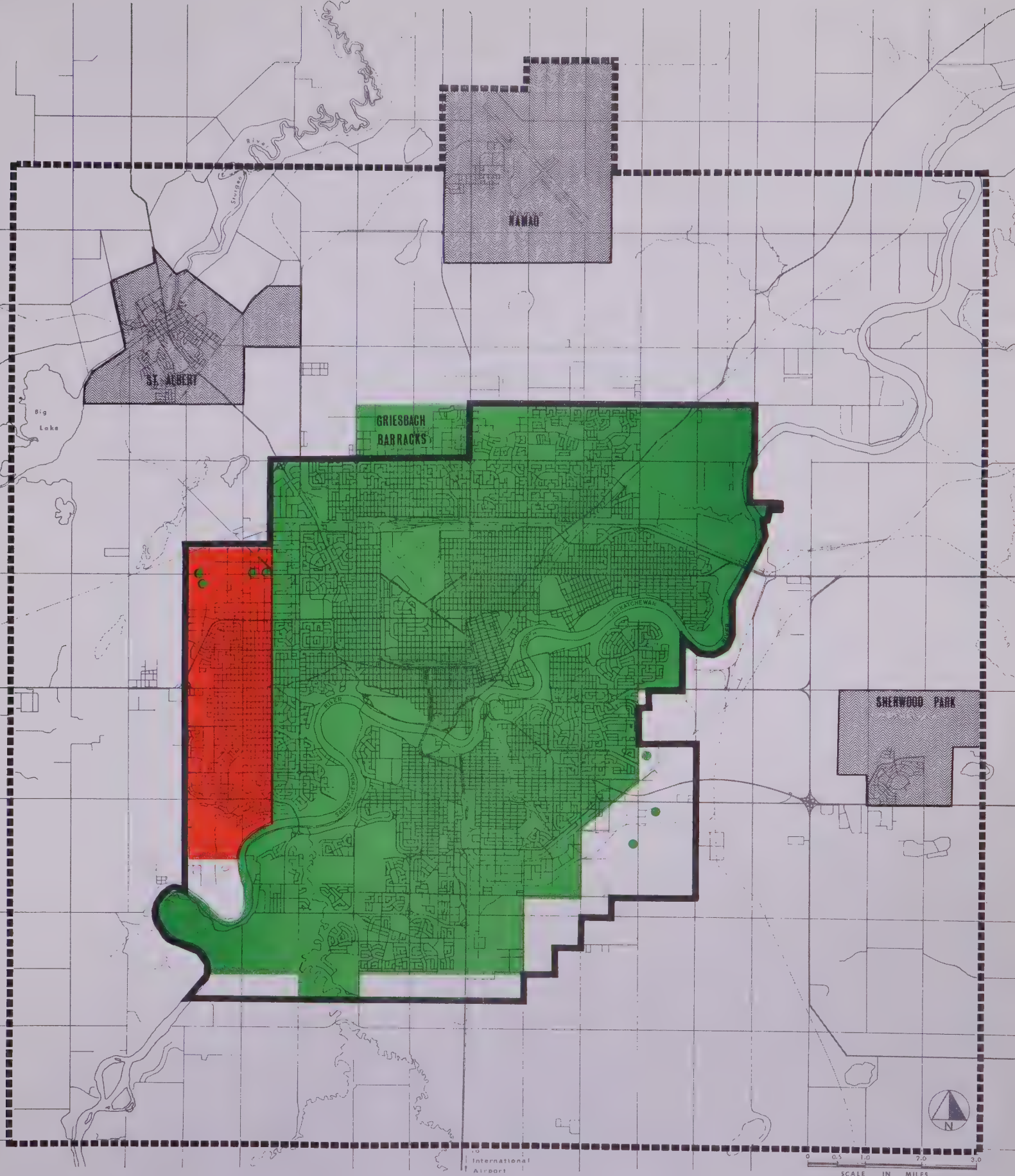


**LEGEND**

-  EDMONTON CORPORATE LIMITS
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# LEGEND

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**F**

*STATEMENT OF HIS WORSHIP MAYOR V. M. DANTZER*





## STATEMENT OF HIS WORSHIP MAYOR

V. M. DANTZER

### INTRODUCTION

Edmonton, the capital city of Alberta, has experienced extremely rapid growth over the past 20 years and it has responded admirably to the strains of such growth. It has now a population of approximately 400,000 within its corporate boundaries of 85 square miles. A metropolitan area is developing on its outer fringes. Such metropolitan growth is comprised mainly of dormitory settlements and spill-over developments which are an integral part of the Edmonton urban community. This community is the industrial, commercial and distributive centre for central and northern Alberta. The City of Edmonton is the hub of such community, providing and serving the outer areas with most of their urban facilities - for example: major hospitals, a university and technical schools, cultural facilities, full-scale shopping, major employment opportunities, as well as supplying water to substantial areas outside the City's boundaries and sewage treatment for St. Albert and Sherwood Park at the request of such areas. Therefore the City of Edmonton is concerned about the well-being of the City itself and of the Edmonton urban community. The City must be concerned in the public interest with adequate financing, sound economic and community planning, efficient operation of its services and fiscal equity amongst its citizens.

### BASIC POSITION OF CITY OF EDMONTON

The City of Edmonton is opposed to the enactment of the proposed Power Commission Act as now drafted and in the public interest must be so opposed. Of cardinal importance to Edmonton is that the City is entitled to and must be allowed to continue to enjoy all power rights to the extent of its corporate boundaries as they may be from time to time. Edmonton's position is supported by the Alberta Urban Municipalities Association which passed the following resolution:

“Now Therefore Be It Resolved that the proposed Power Act should specifically exempt the municipal owned and operated power utilities from control of the Power Commission,  
And Further Be It Resolved that it should clearly spell out in the proposed Power Act, that the municipality has the right to purchase power facilities from private companies in any annexed area. . .”

#### **TOTAL MUNICIPAL PROBLEMS MUST BE MET**

Power cannot be considered in isolation when urban problems are being discussed and urban problems must be discussed when considering power and the proposed Act. Nothing should be put in the proposed Act which would render the solution of urban problems more difficult, if not impossible. The concern of The City of Edmonton, or of any other municipality in a similar situation, to keep its historic and legal rights over power is not one that is motivated by insular selfish impulse. The responsibility for providing a community in which citizens can develop and progress economically, socially, physically and culturally has been thrust upon the City at a compounding rate. The complexities of this responsibility cannot be solved by half-hearted action nor can any facet of these complexities, of which power is one, be administered by action which does not consider all the other facets. In short, there cannot be action, legislation or policy in a vacuum. There must be consideration of all problems, a weighing of the demands, and the balancing of the demands and the supplies of money and resources. The public interest requires that Edmonton, and all other power municipalities, retain their legal and historic power rights for the following general reasons:

- (a) *financial integrity,*
- (b) *soundness of community planning,*
- (c) *efficiency in the supply of power and interrelated functions and*
- (d) *fiscal equity.*

(a) *Financial Integrity:* The public has made staggering demands upon the urban centres for all urban services. The public has also demanded that the quality of these services be improved and that there be equality of services. These demands are being made at a time when costs have been rapidly increasing and sometimes spiralling. The urban centres must find a way to finance all these services or the public will be denied some of these essential services. How can the municipality finance this public responsibility? Expenditures and revenues are presently in a precarious balance. The shortfall of revenues imminent in the future is of the greatest magnitude. The Smith Committee Report for Ontario gives a measure of the fiscal problems that local municipal governments must face in the future. The Smith Committee Report concluded: "To sum up, our projections lead us to the clear and inescapable conclusion that in the absence of remedial measures, the present unsatisfactory revenue and spending positions of the provincial and local governments of Ontario will deteriorate sharply and continuously within the coming decade...The concrete problem that emerges is that of determining the most appropriate means of financing a combined provincial-local expenditure-revenue gap which will have grown to some \$600 million annually by 1969 and to more than \$1,300 million by 1975, just to finance existing programs. To the extent that major new programs are introduced, the projected gap will be correspondingly increased." (The Ontario Committee On Taxation, 1967, Vol. 1, p. 205.) The municipalities of this province comparatively are in no different position. In the past year, the ten cities of Alberta have called for comprehensive and immediate action to solve this fiscal problem which they termed "Urban Crisis". The proposed Act would compound this urban crisis.

Edmonton Power has made a significant contribution to the financing of The City of Edmonton in the past. Even ignoring the property tax paid by the power system, Edmonton Power contributed some \$6 million to the City last year and thereby saved the ratepayers from having an additional \$6 million levied on their property. The ratepayer of Edmonton was relieved of some of the regressivity of the property tax while being provided with low-cost, high-quality power. As well, Edmonton Power has contributed to the strength and flexibility of the City's credit rating. The millions of dollars that Edmonton Power has contributed in the past and the assumption



that it would continue to do so was a key instrumental factor in the City being able to borrow at the rate and on the terms that it did on the New York market this past winter.

Edmonton borrowed \$12 million in New York after the Municipal Financing Corporation refused to provide such funds for priority utility expansion, including Edmonton Power, and capital works. The purchasers of this issue were disturbed about the implications of the Local Authorities Board Act which would allow the Board, if it found the municipality to be in financial difficulty, to lower the interest rate, lengthen the term of maturity, etc. The purchasers confirmed their takings only after detailed factual and legal investigation assured the purchasers that such legislation was unlikely to affect the Edmonton situation. This illustration shows the concern that the investment community has for legislation which, potentially or actually, affects the security that a municipality can offer.

Consider the reaction of investors to the credit rating of Edmonton and the other municipalities of Alberta if the Power Commission Act were to be enacted as proposed. Such legislation would allow the Commission to limit the power boundaries of the municipality and thereby deprive Edmonton, in instances of future corporate growth (whatever form local municipal government may take) of the magnificent revenue contributions of Edmonton Power for such growth areas. This denial of power revenues would be oppressive to Edmonton, as at the same time it would be saddled with the onerous responsibility of extending the non-profit or deficit utilities and services, such as schools and transit, to such growth areas.

Therefore at the same time that the City is being deprived of a revenue tool of low-cost, high-quality service which contributes millions of dollars to relieving the property tax burden, it is predicted that the City's credit rating could suffer, thereby impairing the City's borrowing capacity. Edmonton and the Province of Alberta cannot afford the serious consequences that the passage of this proposed Act would have upon the financial integrity of this City.



(b) *Soundness of Community Planning:* Electric power is one of the significant planning tools by which urban growth can be controlled, directed and co-ordinated. Power is an essential utility that is required for every urban development, residential, commercial and industrial. To structure a progressive community, Edmonton must be able to co-ordinate the adequate supply of the power resource with the supply of other essential community resources such as water, schools and roads to those areas that should be developed at that particular time. On the other hand, a split jurisdiction over power could result in the premature, inopportune development of an area without adequate community resources. Naturally there would then be pressure upon the City to provide these services although development of such an area would be disruptive to the whole plan of the community. Ad hoc agreements amongst the various utility suppliers tend to relieve the pain, but such agreements get nowhere close to curing the illness.

Can the City be assured that power would be supplied at the correct time in the correct place? If the control over power is guided by standards that consider just power alone, then power not the community will be structured. If power is of the prime importance instead of the community, then sound, effective decisions in the community planning field which is of such vital importance to the rapidly developing urban community cannot be made. A split jurisdiction over power is extremely critical when the division line runs unnaturally across very dense community development and the urban centre is separated from its growth area. Edmonton would have to bear the burden of providing all the other costly essential services and would have to shoulder the responsibility for the total development of the community and the private power utility would enjoy the fruits of profit while not sharing in the overall development costs and responsibility.

A split jurisdiction prevents proper timing and placement of new development. It hinders the progress of the underground wiring program aimed at providing better service in a more pleasing atmosphere. It obstructs the proper placement of transmission lines and therefore future transmission lines may impinge upon actual or potential residential development. It denies the City a tool from its

overall scheme by which to attract commerce and industry to provide a proper balance of functions and assessment. In fact, nothing positive can be said in favour of a split power jurisdiction within the corporate limits of the City.

(c) *Efficiency in the Supply of Power and Interrelated Functions:* Technical and financial power operating efficiency suffers when there is a split jurisdiction. Two systems cannot service the Edmonton community as well as one can, especially when such division results in Edmonton Power being a completely closed-in system with no room for geographic expansion and in Calgary Power Ltd. being forced to operate in this area on a much smaller scale. Such a division cannot keep pace with the technological and size advances in such a rapidly developing industry. It is far better for the natural geographic monopoly associated with the power industry to take its most efficient position and allow the various power utility parties to negotiate freely on a province-wide basis in order to share equally in technological progress.

A split system requires extra men, equipment, materials, supplies, capital investment, etc. for the Edmonton community. These extras all cost money—extra money. The citizen-consumer must pay this extra money as a cost and he gets no additional advantage from it.

It should also be remembered that Edmonton is not only in the business of supplying power; the City provides many other services, utilities and projects. Frequently there is an extra economic bonus or social advantage achieved through the interrelationship of civic departments which maintain the highest standards of co-operation and liason. For example, specialized equipment and material inventories can be shared; hot waste water from the generating plant is utilized to keep City water mains from freezing, to lower chemical softening costs in water treatment, and to keep the North Saskatchewan ice-free for better aeration of the water to aid in sewage disposal; common utility billing saves costs in meter reading and in sending out of accounts. Not to be forgotten is the fact that Edmonton Power provides an extremely good base load for the gas utility thereby stabilizing and lowering the price of gas to the citizens of the Edmonton area.

(d) *Fiscal Equity:* The citizen-consumer of Edmonton Power has been paying fair and reasonable uniform declining rates for high quality electric service. Such service has been provided according to published rate structures which have assured each customer that he is being accorded fair and equal treatment. Edmonton Power has been efficiently operated so that it produces a sizeable profit (in the nature of \$6 million in 1967 after paying property taxes). Such profit is contributed to the general revenues of the City to substantially relieve the property tax burden while Edmonton Power is ensured of sound financing and maintenance. The citizen-consumer of Edmonton Power therefore helps relieve the property tax levy by approximately 10%.

If there is a split in the jurisdiction over power within Edmonton's corporate boundaries, as they may be from time to time, a private power utility would serve the citizens of Edmonton in the expansion areas. It will be these same expansion areas which require such great investments of money to provide the necessary services and facilities. But naturally, the citizens of these areas will not make any contribution to the general revenues of the City for these services and facilities through their use of power.

Therefore, the citizens served by Edmonton Power will be subsidizing the citizens not served by Edmonton Power to the extent of the sizeable utility contribution to the general funds of the City. A possible alternative to such subsidization would be a differential mill rate according to the power boundaries, but such a differential mill rate would be an unreasonable cause of dissension among the citizens. As well such a solution would penalize the consumer served by the private utility for not being able to obtain power from Edmonton Power. Therefore, a split jurisdiction over power would result in fiscal inequities for the citizens of Edmonton. The only fair solution is to allow Edmonton to retain its rights to serve its citizens within its corporate boundaries as they may be from time to time.



## **CONTINUED POWER RIGHT FOR WHOLE OF CITY AREA**

Therefore in the complete scope of the public interest, The City of Edmonton is compelled to demand that it be allowed to continue to enjoy full power rights within its corporate boundaries as they may be from time to time. The public interest demands that Edmonton be given the resources with which to meet its responsibility of providing a viable, progressive community and no action should be taken in respect of the Power Commission Act which would hinder the City in meeting this responsibility. Fiscal integrity, soundness of community planning, technical efficiencies and fiscal equity require that the City have full control over power in the future as it had in the past.

## **TAKE OVER PLAN**

Full, fair and adequate compensation would be paid any power utility owner upon the growth of Edmonton, be it through annexation, amalgamation or other change in government. The takeover period would be phased so as to guard against any disruption in the generation, transmission or distribution of power or in the planning or financing thereof which would adversely affect or prejudice the public, the consumers or the owner from whom the power utility was taken over. The compensation to be paid and the details of such takeover should be left to negotiation between the parties, who are naturally most familiar with the situation. Such an arrangement has been successfully employed several times by the City and Calgary Power Ltd. Arbitration should be employed as a last resort in the event that the parties are unable to agree on some of the terms of takeover.

## **CO-OPERATION, (PAST, PRESENT AND FUTURE)**

The City of Edmonton will co-operate in the planning and supply of power for other power systems as they require additional power and similarly the City desires to be able to buy power from the other systems at fair prices when this is required. This co-operation is in the public interest as it protects the various systems for emergency and reserve purposes while ensuring that the overall interests of its citizens are not submerged. Control over Edmonton Power is a matter, in essence, of

local concern as it affects so many facets of community development and life. The City of Edmonton is not being insular because through co-operation, Edmonton Power provides the Alberta power system substantial insurance against power loss in an emergency or restricted power supply over a period of time because of inadequate reserves. At the same time, having rates set by a council which is directly responsible to the electorate provides healthy competition for the other utility systems and supplements the rate control of the Public Utilities Board.

Such co-operation has been exhibited many times in the past by The City of Edmonton. Witness the standing emergency agreement between Edmonton Power and Calgary Power Ltd. whereunder the City assisted Calgary Power Ltd. in times of breakdown and unavoidable delays in commissioning generation plants while enjoying the insurance of a reciprocal agreement. This agreement is to be replaced by a more extensive one involving Canadian Utilities Limited in addition and which will provide for reserve capacity sharing. Similarly the City has recognized the difficulties of Calgary Power Ltd., which has province-wide demands upon it, in servicing its less intensive area surrounding the City's power limits (less intense relative to the City's more concentrated and larger power load). Therefore, for example, the City has responded in the public interest to assist Calgary Power Ltd. in sophisticated hot line work or in adjusting the height of overhead wiring to accommodate passage underneath. The City has co-operated with Calgary Power Ltd. consistently over the years in the supply of additional power--last year to the extent of 180 million KWH.

#### **REGULATION UNNECESSARY AND DISRUPTIVE**

Such co-operation has always been on the basis of reasonableness. The City stresses the importance of negotiation amongst the parties concerned rather than enforced regulation, direction or arbitration by an outside regulatory body as the City feels that the negotiated position is more viable for all the parties than a position forced upon them. Negotiations are much more likely to reflect the many complex questions involved in the supply of power and community responsibilities as the parties involved realize the essentials to be given and received in any contract



or arrangement. Such co-operation has been highly successful in the past and continues to develop.

To impose a regulatory body upon such an atmosphere of evidenced and continuing co-operation would appear to be a fruitless, if not disruptive, exercise. The proposed Act envisages a vast amount of power for the Commission; but this power is not required in respect of the City. The City of Edmonton will make financial and operative reports on the basis of a substantially standardized system of accounts to provide the public with a means of comparison but Edmonton does not see the further need for regulation of its power system.

The desire of the Province, of The City of Edmonton and of all other power utility owners is the adequate supply of low cost, high quality electric power to meet the progressive demands of the citizens of Alberta. Regulation for the sake of regulation will not advance this goal. Such a regulatory body could involve the Province in a great deal of unwarranted expense and unnecessary responsibility and would involve the power utility owners in a great deal of restriction and red tape while accomplishing nothing positive.

## CONCLUSION

The City of Edmonton opposes the proposed Power Commission Act in that the public interest demands that Edmonton retain its legal and historic power rights to generate and distribute power within its corporate boundaries as they may be from time to time. It is only within this framework that the City can:

- (1) Maintain its financial integrity to supply demanded costly services to its citizens through power utility contribution which significantly alleviate the property tax levy and improve the credit rating of the City for borrowing purposes;
- (2) Ensure that its community planning will be effective in providing its citizens with a forward-looking atmosphere in which to develop;
- (3) Operate its power utility most efficiently and contribute additional benefits because of power utility interrelationships; and

- (4) Balance fiscal equity and responsibilities among its citizens as a group without unfair discrimination.

The City will continue to co-operate with the other power utility owners to ensure all citizens of Alberta with the full benefits of electric power. Unnecessary regulation would tend to impede progress in this field as well as involving the Province in unwarranted expense and responsibility.

The City of Edmonton strenuously urges that no step be taken which might adversely affect the optimum solution to its present and future urban growth problems. The proposed Power Commission Act does not meet the realities of power and urban growth as they exist. The Province cannot afford to experiment with power as if it were in the formative years isolated from all other influences; to pretend that this is the case could have disastrous results for The City of Edmonton and for all power utility owners.



**G**

*STATEMENT OF S. J. HAMPTON,  
COMMISSIONER OF UTILITIES*





## STATEMENT OF S. J. HAMPTON

## COMMISSIONER OF UTILITIES

## THE CITY OF EDMONTON

The City of Edmonton and its citizens are in a foremost position in the electric power utility field in Canada by their ownership of Edmonton Power. This power utility has compiled an excellent record in providing dependable, abundant service for low-cost reasonable rate through the teamwork of both its generation and distribution departments.

J. G. MacGregor, Chairman of the Alberta Power Commission noted several glimpses of this excellence in his recently published history of the City – *Edmonton* (1967: M.G. Hurtig):

(p. 279): "During 1947 the City electrical department, the first in Canada to do so, embarked upon a plan of replacing obsolete street lights with mercury vapour fixtures. As a start, they lit up about three blocks of Jasper Avenue from 100 Street east. By 1956 the department decided that henceforth it would install these fixtures in all new subdivisions, and that year established another record by being the first City in the world to order a quantity of an even better mercury vapour luminaire. Within a few years Edmonton had become the brightest lit city in Canada."

(p. 289): "The City-owned electric light department, the power plant, and the water works, forecasting the terrific post-war demand and keeping abreast of the oil boom, did a superb job. By 1951 the power plant had nearly doubled the capacity it had boasted five years before and then doubled it once more by 1956, to reach a size of 120,000 K.W. – one of Canada's largest steam plants. Bowing before Alberta's new status of the gas reservoir, all its new boilers burned that fuel. . ."

Mr. MacGregor touched on the key to Edmonton Power's success in an industry where technological development has been and will continue to be so important in reducing costs for the ultimate benefit of the public - the City has always been in the forefront with improved equipment,

planning and organization. Edmonton Power did not rest on its laurels in the period since 1956; it has continued to grow to meet the demands of increased population and industry which in turn has been tremendously increasing the use of electricity per capita. Edmonton Power's Rossdale generating capacity is presently 405,000 K. W. (392,000 net K. W.) and this is the largest municipally-owned generating plant in Canada. The Rossdale station is to be joined in 1970 by the Clover Bar plant which will commission a 165,000 K. W. gas unit in 1970 and another in 1973. The Clover Bar plant has facilities for the installation of two more such units as required which would allow the system to expand to 1,065,000 K. W. (1,027,000 net K. W.) to serve the citizens of Edmonton directly and the public of Alberta indirectly.

The City-owned utilities have achieved and maintained a high degree of co-ordination in function and planning. Mr. MacGregor alluded to this skill in the post-war and oil boom days. The history of the City in the provision of electric power contains many highlights of such skill and dedication in the public interest. In 1891 Edmonton Electric Light Company obtained a 10 year franchise from the municipality to provide power on a sliding-scale flat-rate basis. When the franchise terminated the Town Council decided to exercise its prerogative to operate a public electric utility and therefore it consummated a deal in 1902 with the private interests to purchase the power plant and distribution system for \$13,500.00. The City, with a change of location for the power plant to the Rossdale site, continued operations until 1916 when the Alliance Power Company took over the plant. This company ran into financial difficulties in 1919 and returned the operations to the City which next year will celebrate its Golden Anniversary of continued and progressive ownership. By 1922 the system had progressively increased its voltage to 13,200 volts in the interests of efficiency and the distribution department had installed its first underground cable. 1927 heralded the commissioning of a 10,000 K. W. Parsons turbine which operated at 3600 rpm, the largest unit then built to operate at this speed. During the period 1938-1955, the generating plant installed low pressure steam equipment to operate at 415 pounds of pressure and 720° F. temperature: - 2 - 15,000 K. W. units and 3 - 30,000 K. W. units to bring the City to the 120,000 K. W. level mentioned by Mr. MacGregor in 1956.

During the period 1949-1955 the generating plant was switched over from coal-firing to gas-firing in the interest of more economical power. The system continues to operate with gas for fuel for this reason with important social side benefits to the community described later. In 1947 the distribution system instituted the first underground low voltage networks in heavy load density areas in the downtown area thereby technically improving the operation while beautifying the area. 1956 was highlighted by the first 72 K. V. oil-filled pipe-type cable in Canada. The Rosedale station had had another Canadian first in 1958 with the "low profile switchyard" employing air blast breakers. This was followed in 1960 by the use of four standard cables in parallel/phase as main generator leads.

1958-1959 saw the installation of 2 - 30,000 K. W. gas turbines which was the first large gas turbine installation in Canada with high speed gas compressors. The period 1960-1966 was marked by the installation of gas fired high pressure equipment which operates at 900 pounds of pressure and 850° F. consisting of 3 - 75,000 K. W. units. This brings the story to the present with 405,000 K. W. installed to service a modern distribution system.

The distribution system made its first major installation of underground service in residential areas in 1959-1960. Since 1965 all new residential areas are being installed with underground systems which utilize joint trench construction for power, street lighting and telephone cable, placing the system well in the forefront of the development of such systems in Canada. The City is acknowledged by technical publications to be one of the best lighted cities in North America. The distribution system's use of mechanization and automated control is probably more extensive than for any other comparable utility in Canada. For example, all distribution circuits from substations are supervisory controlled which allows immediate alternate switching to avoid distribution outage inconvenience. The system also has a high degree of voltage regulation in a sectionalized system which is extremely important for industrial and large commercial use with the reciprocal advantage that this cuts down on the number of service calls required.



Special mention must be given to the distribution system's apprenticeship "on the job" training in conjunction with the Northern Alberta Institute of Technology. This program is of great assistance in the distribution system's major use of regular hot line work on higher distribution voltages (13.8 KV) in which the City is first in Alberta and a forerunner in Canada. Credit must be given to the workers and the union who have cooperated with Edmonton Power in developing skills to work on hot lines. Such hot line work is an example area of cooperation between the City and Calgary Power Ltd. which services some areas of the City including Jasper Place (which will be turned over to the City in 1969 on terms negotiated between the parties). On numerous occasions the Edmonton Power hot line staff has aided Calgary Power Ltd. which, of necessity, has a more widely spread operation, to work on systems without necessitating an outage inconvenience to the public.

Another area of cooperation between the two parties in the public interest is the provision of an interchange and emergency agreement. The present agreement was entered into on October 4th, 1966 and it provides for the following:

- (1) Reciprocal emergency service to the extent of the full capacity of the other system after servicing its own customers and/or the capacity of the interconnecting transmission system (there is presently a 80 MVA tie).
- (2) The City agreed to supply Calgary Power Ltd. with "off peak" power (defined as that "capable of being produced by City generating equipment over and above that required by the then prevailing City load and for the production of which no additional staff is required") at a cost below the City's average production cost.
- (3) Provision for the return to Edmonton of KWH borrowed by Calgary Power during World War II.

The present physical situation of Edmonton Power is illustrated by the General Plant information (Table 1 found on pages G - 12 and G - 13) which includes future and tentatively scheduled generation plant data and by Trunk Power Distribution System (Plate 1 C in the Planning Study by Mr. J. R. Bousfield contained herein) and by the Edmonton Metropolitan Area map inserted at the front of this brief.

The following schedule illustrates the growth of the system over the past decade:



	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
KWH generated by Generation System (to nearest Million)	498	562	631	690	766	841	974	1,049	1,135	1,283	1,546
KWH sold by Gen- eration System											
(To nearest million)	472	535	597	653	718	788	921	987	1,084	1,211	1,461
KWH sold to Calgary Power Ltd.											
(to nearest million)	2	--	--	2	1	13	69	53	49	64	180
KWH purchased from or returned by Cal- gary Power Ltd.											
(to nearest million)	4	5	5	9	--	2	5	1	12	2	--
Cost per KWH sold by Generation System (in cents)	.461	.455	.508	.549	.559	.532	.493	.495	.477	.451	.434
Sale Price to Dist- ribution System (in cents)	.750	.750	.750	.750	.750	.750	.750	.750	.750	.689	.628
KWH sold to City Departments (to nearest million)	472	536	597	653	718	774	852	935	1,035	1,147	1,281
KWH sold to Dis- tribution System (to nearest million)	442	502	563	618	683	740	816	897	997	1,106	1,236
KWH sold by Dis- tribution System (to nearest million)	408	463	520	568	639	684	762	835	919	1,025	1,136
Revenue per KWH purchased by Dis- tribution System (In cents)	1.688	1.691	1.697	1.664	1.610	1.592	1.549	1.474	1.454	1.406	1.330
Revenue per KWH sold by Distribution System (in cents)	1.810	1.810	1.818	1.813	1.664	1.653	1.586	1.583	1.578	1.459	1.391
Cost per KWH purchased by Dis- tribution System (in cents)	1.303	1.288	1.314	1.317	1.266	1.260	1.253	1.215	1.220	1.143	1.078

What has this record meant to the citizen-owner of Edmonton Power? The citizens of Edmonton now own a distribution and generating system having a net book value of in excess of \$51 million as of the end of 1967 and such system generates its own finances to liquidate its own debenture debt.

Not only is the power utility self-supporting but it is also a substantial contributor to the general revenues of the City (ignoring property taxes) as per the following schedule:

Schedule of Contributions - 1958 to 1967 Inclusive

	<i>Distribution</i>		<i>Generation</i>		<i>TOTAL</i>
	<i>5% Rev. Tax</i>	<i>Surplus</i>	<i>5% Rev. Tax</i>	<i>Surplus</i>	
1958	\$ 424,558	\$ 925,181	\$ 198,268	\$ 619,351	\$ 2,167,358
1959	477,358	1,130,674	221,240	755,247	2,584,519
1960	514,503	1,483,944	242,638	789,606	3,030,691
1961	549,745	1,573,704	267,504	708,129	3,099,082
1962	589,543	1,731,395	292,014	807,803	3,420,755
1963	627,532	1,924,805	332,790	979,115	3,864,242
1964	660,869	2,065,331	360,673	1,604,679	4,691,552
1965	724,990	2,146,530	396,811	2,175,925	5,444,256
1966	777,273	2,288,754	408,526	2,395,253	5,869,806
1967	821,440	3,108,400	434,378	2,094,615	6,458,833
Totals	\$6,167,811	\$18,378,718	\$3,154,842	\$12,929,723	\$40,631,094

What does the future have in store for the citizen-owner of Edmonton Power? As indicated previously, the City plans to continue with gas-fired generation equipment, the City having a contract with Northwestern Utilities Limited that is firm as to price for 5 years and as to supply for 17 years. The efficiencies produced by the new plant put on stream previously and now scheduled is illustrated in the Gas Station Efficiencies (Actual and Estimated) (found at the end of this statement). The gas-fired equipment allows a tremendous saving in capital cost as the present Edmonton install-

ation cost is approximately \$80./KW and this saving is emphasized in the present period of high interest costs and inflationary tendencies. It should also be remembered that there is a very great side benefit to the citizens of Edmonton by the purchase of such great quantities of base load gas (in 1967, Edmonton Power took 24% of the total deliveries of Northwestern Utilities Limited in Edmonton, exclusive of the gas delivered to the City on behalf of Calgary Power Ltd). This base load stabilizes and lowers the cost of gas for the domestic gas customer.

However, it should not be thought that Edmonton Power is completely tied to gas as fuel. The City has lease rights on reserves of 100 million tons of strip-mineable coal with a good BTU content as well as owning a quarter-section for a plant location at Genessee. The City has engaged in extensive research as to the feasibility of operating coal-fired units at either Genessee or Ardley; but it decided that it was more logical to go with gas for the present. It should also be mentioned that the City has previously had extensive experience in coal-burning operations.

The load and generation histories and projections are illustrated by the graph found at the end of this statement. Naturally, if Edmonton Power were to service the Edmonton Metropolitan Area or parts thereof, some adjustment would have to be made in respect of streaming on the scheduled equipment. This would be done after consultation with Calgary Power Ltd. and the changeover would be co-ordinated so as not to interfere with the public interest. It should be recognized that the City would operate at a better operating efficiency than even now if it could obtain a heavier base load by serving all its own citizens.

The City, Calgary Power Ltd. and Canadian Utilities Limited are currently negotiating a reserve sharing agreement in which there is substantial agreement as to the following basic points:

- (a) Each party is to carry a 15% reserve over the winter peak at all times.  
If any party is short of this reserve in any year, such deficient party pays the surplus capacity parties for such surplus at a rate of \$9.00 per KW.
- (b) Emergency power is to be sold between parties as required at the incremental cost of generation, plus 50%, or it can be exchanged by mutual agreement.



on a KWH basis.

- (c) The parties involved are to meet yearly to co-ordinate planning, sizes and installation dates of generating equipment. Such an agreement illustrates the concern of the various power utilities for the advancement of the public interest.

Edmonton Power is, of course, just one of the many aspects of civic life in which the City is involved. There are frequent instances where the interrelationship and interdependence of the various civic functions assist the public to get an extra benefit. Consider the case of the heated cooling waste water from the turbine condensers which is used in the winter to heat the domestic water supply thereby making the softening process more efficient and preventing a freeze-up in the water distribution mains and services. As well, stretches of the river are kept ice-free all year round which increases the dissolved oxygen content of the river in the winter months thereby aiding in sewage treatment. Consider the position of the Edmonton Industrial Airport which would have been required to purchase a standby lighting plant if it were not for the concession by the Department of Transport, that approach lighting need not be on standby because of the existence of two other airports in the area and because of Edmonton Power's demonstrated reliability.

Further there is the question of savings and convenience in meter reading and billing-- the same meter reader services the householder for both water and power and the consumer is billed for the package unit of water, telephone and power on the same invoice. The industrial development department is aided by being able to discuss with industrial prospects on a wide scale of services; a dual jurisdiction over power would prove a hinderance in discussing utility arrangements and costs. The Edmonton Power consumer may take advantage of the system's rewiring loans, and patio and security lighting programs.

The various civic departments have an excellent liaison with Edmonton Power and any problems which may arise can be easily settled internally by the City Commissioners rather than in dragged out proceedings. Other features of this civic liaison allow for a reciprocal under-

standing and co-ordination of the Planning Department with Edmonton Power; each department relies heavily on the experience of the other. Therefore, maximum progress can be achieved in civic planning for a pleasing, functional city which does not hamper technical and economic efficiency. Edmonton Power being of a sufficient size has available the capacity and flexibility to meet day-to-day requirements of the other civic departments for moving poles, raising overhead wires, etc. Red tape in these jobs is avoided. Edmonton Power and Edmonton Telephones cooperate in cost sharing of joint distribution poles, co-ordinate inventories on special items and loan specialized equipment as required. Edmonton Power maintains its record plans in a very complete manner which allows all technical departments to have full knowledge during their engineering studies; this accuracy and completeness of records is of vital importance when dealing with underground wiring.

A split jurisdiction over power within the corporate boundaries of the municipality would negate the above examples of co-ordination, cost-saving and liaison. Of vital interest to the public is the confusion caused in time of emergency by a person not knowing which power utility to call; in non-emergency times this confusion is of significant nuisance value. As well, when rates vary within the corporate boundaries, it leads not only to confusion by the customers, but also it leaves doubt as to whether or not some sections of the public are at an unfair disadvantage as compared with other sections. Further examples involve questions of ensuring uniform lighting on major freeways which may cross power boundaries. As well it is impossible for the City to levy local improvement charges for work done by a private utility owner in an area served by the private utility.

Edmonton Power is proud of its high standards in street lighting, underground wiring, skilled staff, reasonable rates, reliable service, etc. It desires to provide this excellent service to all the citizens of Edmonton so that they all may enjoy such high uniform standards. A reciprocal feature of this desire is that it would allow Edmonton Power to take maximum advantage of technological advance in larger scale plants if it were able to expand territorially with the city boundaries as well as through increased density and intensity of use of power within the old city boundaries. Such an expansion of a proved profitable utility operating at reasonable rates would help offset traditional deficits created in other utility and services fields by expansion (e.g. Transit)



as it seems hardly reasonable that the City should be expected to extend its deficit utilities and services and not its profitable ones. The City should not be shouldered with the responsibility and cost of developing the growth areas while being deprived of the power resource to help balance costs. It may be conceivable that service areas would be valid in municipalities where there is no civic power utility in operation but set service areas are not desirable in municipalities such as Edmonton which has a power system installed and producing City revenue. As well it seems that if the municipality does not own and operate its own utility that there is sufficient control for the municipality in its grant of a franchise which could provide for utility extension with civic boundaries. It does not seem reasonable to hem in a municipal system with another distribution system which because of size factors must operate locally on a smaller, and of necessity on a less efficient, scale which is involved in heavy transmission line expenditures and power losses to areas which can be more easily served by a strict generation - distribution system which has sold over 400 million KWH to the ringing system over the past 5 years.

What is Edmonton Power's record? It appears to be excellent and the public interest well served. Strides are being made in introducing larger units to achieve large scale design and production economies as well as negotiated co-ordination with the other power utilities for reserve, exchange and emergency purposes. Low cost, reasonable and uniform published rates are charged for safe, reliable and abundant service. The accounts of the system reflect fairly the financial position of the utility. Transfers to general city funds are made after proper designation as to function is made. Finally, the City has not had any difficulty in financing the extension of Edmonton Power and this utility enjoys a very favorable debt-equity position. It is therefore submitted that Edmonton Power be allowed to continue its right to expand to the limits of the civic boundaries as they may be from time to time and that it not be regulated on any other basis than one of reporting financial and operating results while conforming to substantially the same uniform accounting standards. No other regulation is necessary or desirable.

TABLE 1

## GENERAL PLANT INFORMATION

BOILER NO.	NAMEPLATE RATING	COMMISSIONING DATE	FUEL	EFFICIENCY	
				GAS	OIL
B1	165,000 lb/hr	1938	Gas/Oil	82%	85%
B2	135,000	1932	Gas	82%	----
B3	165,000	1941	Gas	82%	----
B4	165,000	1947	Gas/Oil	82%	85%
B5	165,000	1947	Gas/oil	82%	85%
B6	200,000	1953	Gas	82.04%	----
B7	330,000	1955	Gas/Oil	83.13%	86.36%
B8	660,000	1960	Gas/Oil	85.1%	89%
B9	660,000	1963	Gas/Oil	86.1%	89%
B10	660,000	1966	Gas	86.1%	----
B11	1,100,000	1970	Gas/Oil	84.85%	89%
B12	1,100,000	1973	Gas/Oil	84.85%	89%
B13	1,100,000	1976	Gas	*85%	----
B14	1,100,000	1979	Gas	*85%	----

\*Expected

TABLE 1 (CONT.)  
GENERAL PLANT INFORMATION

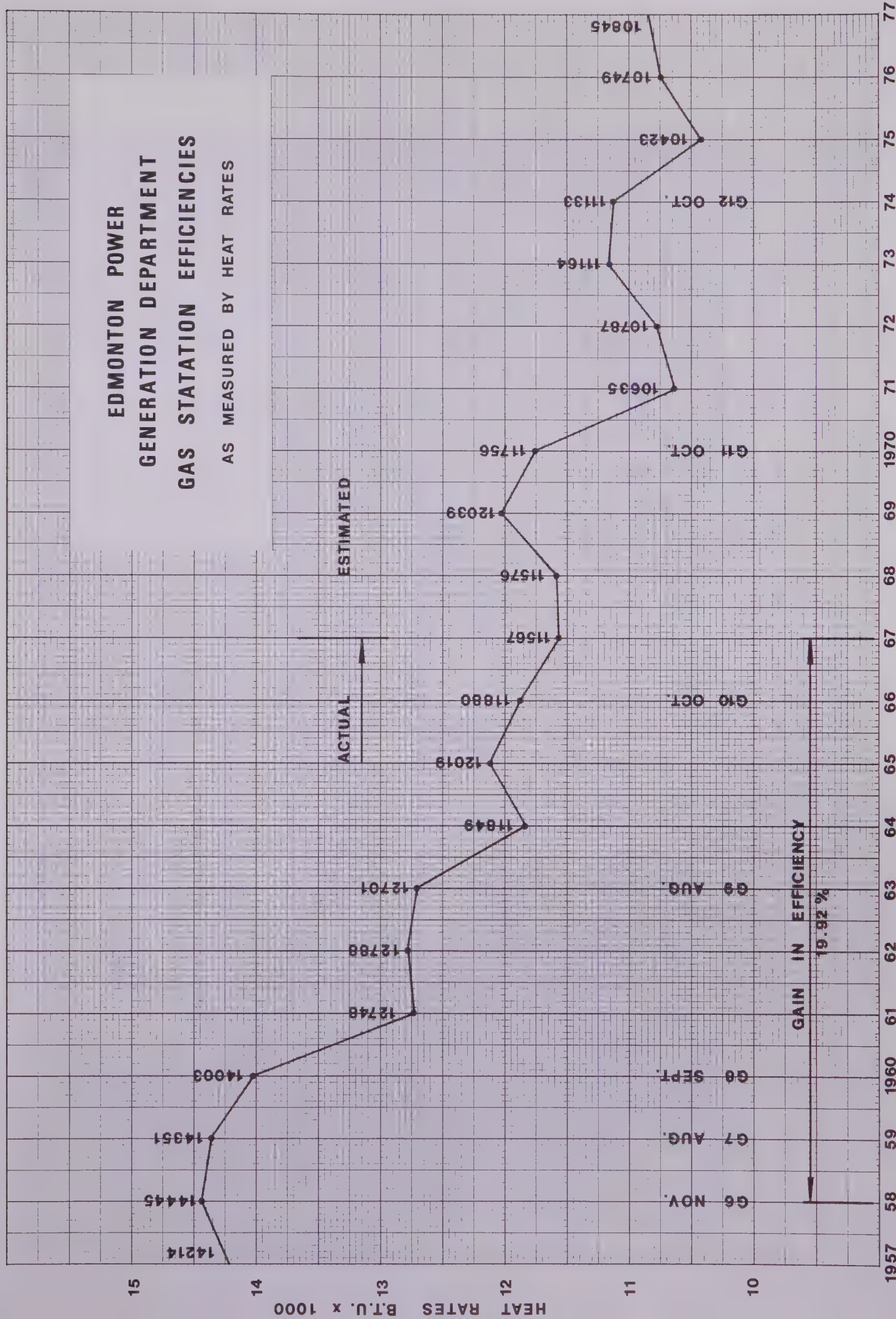
GENERATOR NO.	NAMEPLATE RATING	COMMISSIONING DATE		EFFICIENCY — GROSS BTU/KWH      %		KWH GENERATED TO DATE (DEC67)
G1	15000 KW	March	1939	10870	31.4	1500x10 <sup>6</sup>
G2	15000	March	1944	10870	31.4	1000x10 <sup>6</sup>
G3	30000	August	1949	10827	31.5	2500x10 <sup>6</sup>
G4	30000	October	1953	10827	31.5	1743x10 <sup>6</sup>
G5	30000	November	1955	10685	32.0	1547x10 <sup>6</sup>
G6	30000	November	1958	11950	28.5	210x10 <sup>6</sup>
G7	30000	August	1959	11950	28.5	136x10 <sup>6</sup>
G8	75000	September	1960	9455	36.1	2905x10 <sup>6</sup>
G9	75000	May	1963	9068	37.6	1852x10 <sup>6</sup>
G10	75000	May	1966	9082	37.5%	516x10 <sup>6</sup>
G11	165000	May	1970	7983	42.7	-----
G12	165000	May	1973	7983	42.7	-----
G13	165000	May	1976 Expected	8000	42.7	-----
G14	165000	May	1979 Expected	8000	42.7	-----

All efficiencies are at Nameplate Rating



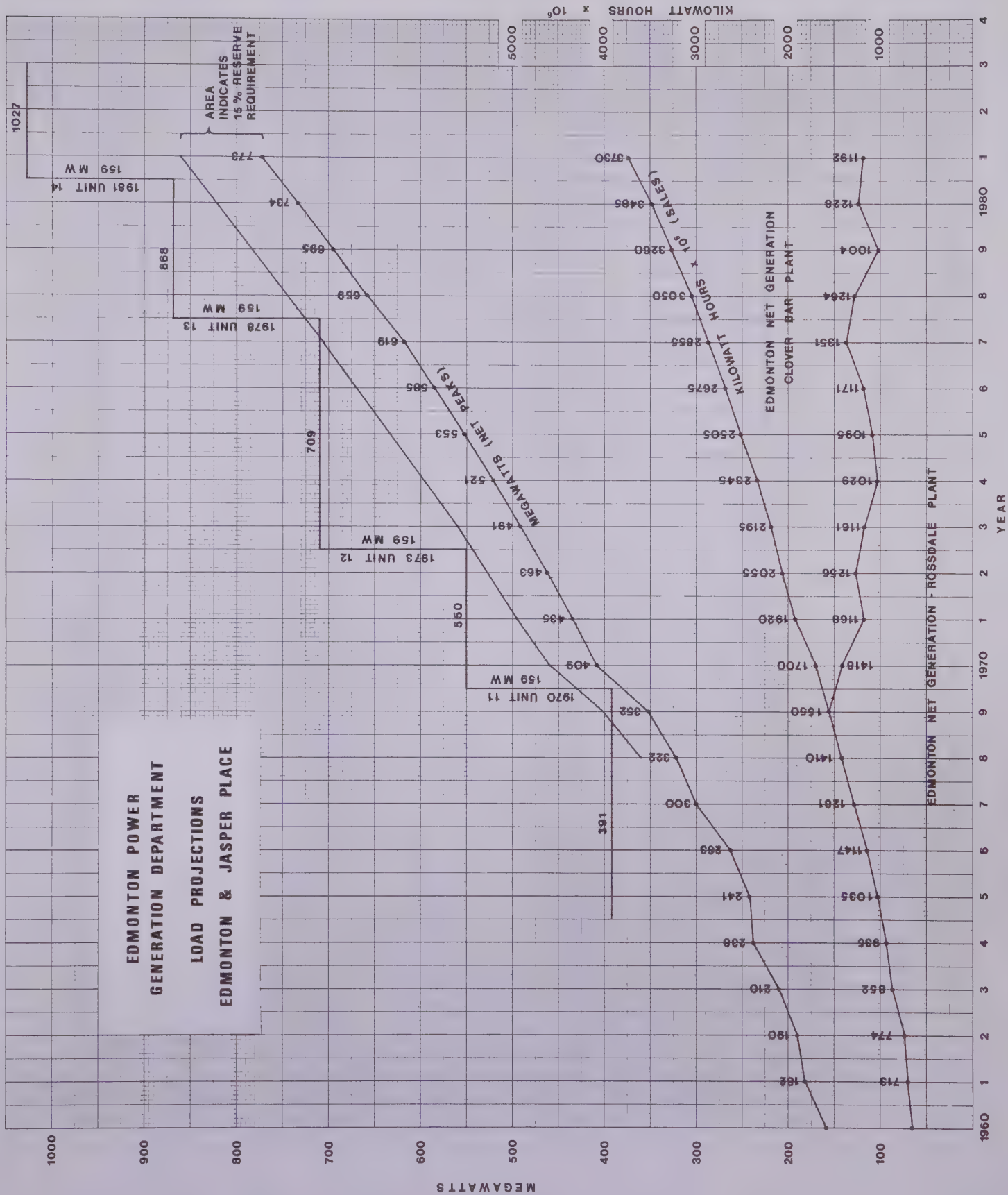


# EDMONTON POWER GENERATION DEPARTMENT GAS STATION EFFICIENCIES AS MEASURED BY HEAT RATES













*COMMUNITY PLANNING ASPECTS*  
*BY J. R. BOUSFIELD,*  
*PROCTOR, REDFERN, BOUSFIELD AND BACON*





SUBMISSION TO  
SPECIAL ADVISORY COMMITTEE  
ON THE  
POWER COMMISSION ACT  
COMMUNITY PLANNING ASPECTS

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TORONTO, ONTARIO



## I. INTRODUCTION

1. For the past two decades, long range planning has been an accepted function of provincial and local governments in Alberta, and the intervening years have witnessed substantial achievement in the production of comprehensive plans for both urban and rural areas. This activity coincided with a period of accelerated growth and rapid urbanization, and was obviously stimulated by those conditions. The relatively ready acceptance of plans and implementing development controls by the public generally, and by the social and economic systems was undoubtedly promoted by an awareness of the consequences of inaction.
2. Nowhere was the need for planning more critical than in the nation's burgeoning metropolitan centres. In the Edmonton Urban Area, the most rapidly growing of all, the challenge has been responded to, at least in part, by the publication of the General Plan for the City of Edmonton. Beginning with a statement of objectives, this document sets out general and specific proposals for land use, transportation, utilities and community facilities. It is noteworthy that the objectives are regional and metropolitan, as well as municipal, and the land use and servicing proposals are set out in the context of the whole urban area. It is also of note that this Plan contains a development program and policies for implementation, the lack of which has severely limited the effectiveness of earlier and less comprehensive plans prepared for other major cities across the country.
3. The Edmonton General Plan covers the period to 1981. The primary purpose of the planning chapter of this brief is to furnish a somewhat longer range view of the Edmonton Urban Area to the year 2000. Electric power supply and distribution are vital to the ultimate realization of that growth. It is therefore our intention to acquaint the Committee with the very serious long term implications of the proposed legislation which will govern the administration of electric power in the provincial capital.

4. Electric power is and should be recognized as one of the fundamental tools for the implementation of a long range plan. Through the timing and sequence of the provision of power supply and distribution, sewage collection and treatment, and water supply and distribution, a municipality can guide the rate and direction of its expansion. Conversely, by the non-provision of such services, the municipality is able to discourage premature or otherwise undesirable development. In this sense, these essential services are recognized as constituting cardinal planning and development controls.
5. If long range plans are to be implemented in an efficient and orderly way it is imperative that all implementing tools, and all development controls be vested in a single strong central authority having jurisdiction over a suitably large area to accommodate long term growth. In the Edmonton region, the City of Edmonton is the central urban entity. This chapter therefore argues that, from the planning point of view, it is eminently desirable that, like all essential utilities, control of power supply and distribution within its boundaries as they exist from time to time should be absolutely guaranteed to the City.
6. If a municipality is to exercise proper responsibility for its future growth and development, it must have effective and undivided control over planning, the installation and operation of services, and revenues. It is true that, where divided jurisdiction is countenanced in any of these fields, administrative agreements and ad hoc working relationships will evolve, but experience has consistently shown that such arrangements are palliatives at best. Proper urban development is dependent upon the provision of all essential utilities and services in a co-ordinated way. Thus it is useless to proceed if only water and sewers are available, but not power or schools. It logically follows that full control over the planning, installation, operation, and and any revenues from not just some, but all of these services should be centralized in the municipality.

## II. THE EXTENT OF FUTURE GROWTH

7. Plate No. 1 shows, in a generalized way, the existing pattern of land use, the extent of development in the City of Edmonton and surrounding urban area, and the boundaries of the several local government jurisdictions there.
8. The series of overlays depicts the network of trunk water, sanitary sewer, and power lines and supply points serving the urban area. A curious difference is immediately apparent. The City of Edmonton supplies all the water inside its corporate limits, and to very substantial areas outside. It provides all the sewage treatment within its limits but only to St. Albert and Sherwood Park beyond. On the other hand, the City supplies the majority, but not all of the electric power within its limits and none outside. Although relatively modest in impact at this date, it is obvious from Plate No. 1 that these differences will be greatly accentuated as further development continues. Without corrective legislative and administrative measures, the possibilities of fully co-ordinated provision of services will inevitably diminish. For the urban area as a whole, it is inconceivable that any positive effects will flow from such a circumstance.
9. Plate No. 2 is a graph which projects population growth to the year 2000, by which date about one million persons are expected to reside in the Edmonton Urban Area. This is an extrapolation of the growth projections contained in the General Plan, which postulates an Urban Area population of some 640,000 persons by 1981. The statistical bases for those projections are described in the General Plan<sup>(1)</sup> and need not be restated here.
10. The estimated distribution of the population for the benchmark years is set out in the following table.

(1) Chapter III pp. 28-33.



Year	City of Edmonton	St. Albert	Sherwood Park	Rural	Total
1967	393,565	10,243	7,000	9,484	420,290
1981	570,000	35,000	25,500	9,500	640,000
2000	900,000	55,000	35,000	10,000	1,000,000

11. Similarly, the economic base for Edmonton's future growth as a regional service manufacturing complex, and focus for government, educational and other institutional uses is described in the General Plan<sup>(2)</sup>

It is only necessary to emphasize here Edmonton's importance to the social, economic and cultural life of the Province and of the whole north west region of which it is the focus.

12. If Edmonton is to continue to fulfil this pivotal role, something more is required than merely permitting the City to expand, It must be encouraged to flourish. However, even the most imaginative of plans will be frustrated by unco-ordinated servicing and insufficient revenues.

### III. THE PATTERN OF FUTURE GROWTH

13. Plate No. 1 also illustrates, again in generalized fashion, the probable extent and pattern of development in the Edmonton Urban Area at the end of this century. The extend of urban development and the acreages allocated to the major land uses are based on criteria for land area requirements similar in principle, but modified appropriately in application, to those utilized in the 1981 Plan.
14. The pattern of development is an extension of the 1981 Land Use Plan. (Drawing 3, Chapter IV of the General Plan). The expansion pattern is for residential development to proceed in a northeast, southwest and westerly direction (including growth

<sup>(2)</sup> Chapter II

in Sherwood Park and St. Albert) with industrial development to be concentrated in the northwest, southeast and to the east beyond the city's present boundary. This basic pattern has been evolved over the past several years and the present plans for expansion of city services - utility services, transit, roadways - are based on this pattern of growth.

15. Of primary consideration in the delineation of the proposed expansion plan are these factors:
  - minimum cost in the extension of utilities - power, water, sewers and transit;
  - minimum cost in providing other urban services - schools, parks, libraries, police and fire protection, telephone, garbage collection, street maintenance, etc.,
  - basic amenities of the land as to topography, view, natural tree cover and presence or absence of air pollution, noise, and water pollution; and
  - travel time and distance to the urban centre and location of work place, shopping centres and recreation areas.
16. It will be observed at once that the year 2000 picture presupposes essentially a continuation of the contiguous growth form of development. The two existing dormitory satellites, St. Albert and Sherwood Park, remain in expanded form, but essentially future growth is to be accommodated by additions to the main urban concentration and, to considerably lesser extent, by intensification of uses at the city centre via urban renewal.
17. There are many forms of urban growth, but the great majority of the world cities are of the core type, that is to say, they focus on a single strong central area with suburban growth occurring concentrically and contiguous to existing development. Other clearly recognizable, if less frequently encountered types are: the sheet form (Los Angeles), galaxy (the Ruhr Valley cities), ring (San Francisco Bay Area), star (early Washington), linear (Swiss Valley cities), poly-centred (Minneapolis - St.

- Paul) etc. These forms usually result from dominant physical features or historic settlement patterns.
18. Edmonton is basically a core type city with two satellite communities - one being an expansion of an early town, the other a community planned in the early 1950's. In the period 1957-1967 these two communities accounted for almost 10 per cent of the growth of the metropolitan area. However, their growth rates of about 30 per cent per year in the early 1960's have declined to 4.2 per cent for St. Albert and 12.9 per cent for Sherwood Park for the year 1966-1967.
  19. Considerable planning thought, and some experiments in Canada today are being directed toward the possibilities of new urban forms, created by deliberate public policy. These have as their inspiration the British New Towns on the one hand, and the American Greenbelt Towns and Scandinavian satellite towns on the other. The two kinds differ in that the former seek to be self sufficient in terms of economic base, essential utilities, and all but the most specialized of business and personal services, institutions, and cultural and entertainment facilities, which continue to be supplied by the central city. The New Towns therefore tend to be further removed from the central city than the satellites which, in general, tend to be simply dormitory suburbs<sup>(3)</sup>. The satellites typically provide a correspondingly narrower range of business, social and institutional services, and few job opportunities.
  20. Despite these fundamental differences, both types have as a common objective a reduction, (but emphatically not a cessation) of the growth of the central urban mass, and hopefully a parallel mitigation of the social problems and congestion which are aggravated by sheer size. Satellites and new towns offer an alternative to people who wish to share the economic opportunity, but not the usual living

(3) *Indeed, the Stockholm satellites are connected to the city by the rapid transit system from their inception.*



environment, of the great metropolitan regions. They are in no sense an attempt to stop the growth of the central city. Nowhere have the social and economic goals of a society permitted the truncation of its great cities<sup>(4)</sup>.

21. The largest metropolitan areas in Canada are now of a size that the terms 'satellite' and 'new town' are common currency in public debate of those cities' futures. Question has already arisen as to their much wider application in the Edmonton growth picture.
22. The form of the future urban area will obviously influence in no small measure the future structure of local government in the Edmonton region, and thus it will have significant effects on the way in which utilities are provided. The future urban form is therefore critical to any long term legislative decision made now which might complicate rather than simplify the future administration of utilities. Accordingly, it is thought worthwhile to digress further, in order to discuss the probabilities of new towns and satellites in Edmonton's future.
23. In order to offer an attractive alternative for living, satellites and new towns must provide, from the outset, a much wider range of community facilities and business services than is warranted, in economic terms, by the size of the early development. New utilities systems must be created or, depending on distance, expensive extensions of trunk lines from the central city must be installed in the beginning. Substantial improvements to transportation facilities connecting to the central city are required. Thus the start up costs for satellites and new towns are staggeringly high. Except in the United States, where quite astonishing amounts of private capital appear to be available for such developments as Reston, Virginia, or Columbia, Maryland, very substantial subsidies out of public funds are essential. Depending

(4) *Paris (1945 - 1966) and Moscow (since 1931) are perhaps the most conspicuous failures of the attempts to limit the size of cities by arbitrary means.*



on the local government structure, there may well be an inadequate local tax base to meet these costs, and direct financial intervention by the province must be accepted as a part of the equation.

24. In order to reduce the start up costs somewhat, it is sometimes suggested that established smaller settlements in the metropolitan orbit be used as nuclei for the satellites. The proposal has considerable merit, but is not without problems of its own. The inherent difficulty is that an older community is seldom laid out in such a way that it can serve as a satisfactory core for a greatly expanded population, without serious disruption and expensive reconstruction costs. In addition, it is unlikely that the assessment base or borrowing capacity can sustain the financing charges attendant upon rapid growth.
25. In the case of new towns, where self-sufficiency in jobs is an objective, tax incentives, freight rate subsidies and other measures are normally necessary to induce industry to locate. Unfortunately it is difficult to ensure that such inducements attract industry only from the central city, and not from smaller cities elsewhere in the province.
26. Having in mind these basic considerations of cost, it seems unlikely that satellites or new towns will be embarked upon except where social problems or congestion in the central city approach or exceed tolerable levels. Are such conditions likely to be reached in Edmonton in the foreseeable future?
27. We think not. In the first place, if the population projections prove to be reasonably accurate, the Edmonton Urban Area will not approach a million population for the next 25 - 30 years. Even then the population of the central urban mass is expected to be only about 900,000. Except in the unusual circumstances, satellites and new towns are undertaken in response to the problems of cities

well in excess of a million persons <sup>(5)</sup>.

28. Secondly, Edmonton is relatively new. The city is less than 100 years old, and more than half of its present development is post-Leduc. Thus it occurred after the advent of modern city planning practices and design techniques. A high standard of public services is maintained. The heaviest industries came lately to the scene, and occupy a peripheral location, whereas a wide belt of open space, with attendant recreational facilities, slants through the central parts of the community. An energetic urban renewal program is underway in the deteriorated parts of the urban fabric, and there is evident concern for the quality of the urban environment. Large tracts of sub-standard living areas are therefore not in prospect. Add to this, the relatively high level and good distribution of personal income and the abundant evidence of a vigorous community spirit. Furthermore the prospects of widespread social problems are simply not menacing. Without implying a smug complacency, pressure for unusually expensive forms of urban development on this account appears remote.
29. Thirdly, although important sums will have to be spent on the expressways, transit and street improvements envisioned in the General Plan, it is clear that such facilities will have to be provided as the city grows, whether or not the rate is retarded by the commencement of one or more additional satellites. In any event, many other cities with less satisfactory street patterns, more serious physical barriers, and without the advantage of 360° access to the central area are surviving the costs of transportation improvements. It therefore seems unlikely that congestion will reach intolerable levels.
30. Accordingly, we conclude that the classic motivations will not materialize in Edmonton in the foreseeable future, and unless undertaken purely for the sake of form, satellites and/or new towns (beyond the two which now exist) are not likely additions to the urban growth picture.

(5) *Tapiola outside Helsinki (population 400,000) was undertaken primarily in response to the resettlement problem created by the Soviet annexation of Karelia after World War II. The Ottawa experiment derived mainly out of consideration for the form of a national capital.*

31. On the other hand, we believe that the pattern proposed on Plate No. 1 can be reasonably anticipated, for very compelling reasons. First of all, contiguous growth of the central city is in step with the basic motivating drive behind the whole process of urbanization. It is the large cities which provide the variety of economic opportunity, the range of specialized business, professional, personal and medical services, and the social, cultural, educational and recreational experiences which attract people. Their presence and activities further expand the range and diversity of all pursuits, in turn attracting more people, and so on. As long as living conditions remain satisfactory, continued growth of the central city is the most natural and predictable, and hence the most likely form of future development.
32. Secondly, contiguous growth remains the most economical form of development, at least until the costs of social problems and/or congestion begin to outweigh the cost advantages in providing new utilities, schools and other community facilities by short extensions rather than by the provision of wholly new systems.
33. Consider the application of this thesis to the Edmonton Urban Area. Storm drainage requires basically a connection to a river or ravine leading into a river. If this was the only factor to consider Edmonton would develop quite linearly along both banks of the North Saskatchewan River.
34. In respect of sanitary sewerage, all the sewage must enter a treatment facility of which Edmonton presently has three - a 3 million gallons per day facility at Queen Elizabeth Park (to be closed within the next 2-3 years), a 25 million gallons per day facility in Gold Bar, and a 5 million gallons per day lagoon system northeast of the city.
35. Present plans are to double the capacity of the Gold Bar treatment plant. In regard to new development it would be most economical to proceed immediately adjacent to existing development. In general, there are no substantial differences in cost in developing residentially in any of the directions available. As one moves further from the



city, however, the deep gravity designed tunnels reach towards the surface. Beyond the points that the tunnels break the surface, pumping of sewage would be required. In the main, these points are about 2 to 3 miles beyond the present city boundary. Therefore, on the basis of the sanitary sewer system it would be most efficient to develop on a contiguous development rather than a satellite town basis.

36. The basic advantage of contiguous development is that costs for extending utilities through undeveloped areas are not incurred. From the water standpoint, for example, the City of Edmonton has become the only supplier of potable water in the metropolitan area serving St. Albert, Sherwood Park, Nampa, the International Airport and the Alberta Hospital. Satellite growth would cause the unnecessary investment in pipeline and the need for pumping equipment to overcome the loss in water pressure in the extended line.
37. In the first few years, new neighbourhoods rely very heavily on adjacent communities for schools, parks, and other urban services. For some services such as elementary schools, the neighbourhood becomes self-sustaining very quickly. For other services such as senior high and vocational schools, and libraries, a population of 30,000 to 50,000 would be needed. In effect, then, residents in a satellite town must either receive an inadequate supply of some urban services or make a considerable extra payment for the services.
38. The most prominent natural features in the Edmonton area are the ravine and valley systems of the North Saskatchewan and Sturgeon Rivers. The amenities of the valley in the metropolitan area are basically no different than the amenities of the valley 10 or 20 miles distant. Giving consideration to the river valley, it would be proposed that residential development generally extend along the valley and industrial development be located in areas of lower amenity - except for some heavy industrial establishments which require large quantities of water.

39. The urban resident makes many trips daily - to work, to shop, to a recreational area. The basic advantage of a city is the ability to accommodate these facilities within reasonable proximity to each other. Satellite development would - depending on the location of the satellite communities - cause an unnecessary expenditure in travel costs and travel time in getting from origin to destination.
40. Too much emphasis cannot be placed on the problem posed by the costs of financing the works and improvements necessary to accommodate urban growth at the rate which must be anticipated. For example, the Smith Committee Report<sup>(6)</sup> based on four years' investigation, contains the startling prediction that, by 1975, the combined Ontario provincial - local expenditure - revenue gap just to finance existing programs will have grown to more than \$1,300 million annually. No source for such money is in sight. It is pure fantasy to expect that Edmonton will somehow escape this inevitability. It would be equally unrealistic to assume that the City will pursue anything other than the most economical and efficient pattern of growth.
41. Plate No. 1 shows that the residential, commercial, industrial and other land requirements for 900,000 persons in Edmonton proper may be comfortably accommodated within a ring of natural or artificial barriers which can be effectively employed to contain the size of the central city for the next thirty years. On the west lies the Indian Reserve. To the northwest, the flight path of Namao Airport reinforces the height-of-land (a drainage boundary) between the North Saskatchewan and Sturgeon watersheds. Preservation of this gap will enforce the desired physical separation of the St. Albert satellite from the central city.
42. Namao Airport lies across the north and across the northeast another flight path reinforces a major ravine. Along the east side, a buffer strip will be required along the lee side of the major heavy industrial concentration. This will guarantee the physical separation necessary for Sherwood Park to function as an urban satellite. The south-

(6) *The Royal Commission on Taxation Report, Ontario Vol 1. (1967) p. 205.*



ern limit for expansion is defined by the limit of gravity flow through the established system of sanitary sewerage.

43. Many years hence, as this area approaches full utilization, a new generation can decide, in the light of all the knowledge then available, if and where this restraining cordon should be breached, or whether it should be retained, with a new and extensive series of satellite or new towns commenced as the primary solution to continued growth in the metropolitan region. In the meantime it would be regressive to take legislative steps which might render such a decision impossible, or more costly.

#### IV. IMPLICATIONS FOR ADMINISTRATION

44. For the time being, the compact urban form, and the clear definition between urban and rural offer a rare opportunity to create a single unit of local government embracing the entire urban area for a long time to come. Within the circumference of this jurisdiction it would be possible to achieve unified control and the co-ordinated provision of all services, a pooling of all resources to underwrite the costs of those services, and an equitable sharing of any revenues which may derive therefrom.
45. In view of the unavoidable difficulties which growing cities now or will face, it must be only sane, reasonable and just to minimize those problems to the extent of providing a suitable base for administration. Surely the principle of unified municipal control over all services within the municipal boundaries cannot be denied by anyone cognizant of the magnitude of the urban growth problem and conscious of the concerted effort required of government at all levels to meet this challenge.
46. It is almost universally accepted that municipalities should be spared the problems arising from divided responsibilities for services within their corporate limits. Complete jurisdiction over all utilities normally follows any boundary change automatically. Thus in Ontario, for example the cases for the extensive annexations (such as Brantford,

Sudbury, Welland, London, Peterborough, Windsor, etc.) and amalgamations (such as Burlington, St. Catharines, Oakville, Sault Ste. Marie and North Bay) which have occurred in response to postwar urbanization, were founded largely on the need for such unified servicing control. The benefits since derived from those boundary changes can be readily traced to the improved level, co-ordinated installation, uniform specifications and equitable cost and revenue distribution for water, power, sewers and other services throughout the whole of each community.

48. In distinct contrast, the division of responsibility for, and the uneven ability to finance services between the metropolitan corporation and the constituent municipalities comprising a single urban unit continues to plague the Toronto federation. For example, a home buyer in Scarborough pays a borough trunk sanitary sewer levy of \$5.00/ft. frontage. In North York, the charge is \$2.50/ft., and in Etobicoke, nothing. Scarborough charges a \$25/lot levy to finance its trunk water mains, the others require no payment. Similar inconsistencies exist in charges for underground power line installations and street lighting. In Scarborough, the combined charge is fixed at \$242/lot. In North York, the charge varies from subdivision to subdivision, depending on the design. In Etobicoke, underground wiring is not mandatory. A developer also has the option of on-street or rear-of-lot overhead systems. Where underground wiring is selected, the combined charge, with street lighting, is \$224/lot.
49. After 15 years, such differences in capital charges as well as user rates have not been resolved, although the average consumer is able to discern no comparable variation in the level of service received. Small wonder then, that adjustments to the system are still being made to spread the costs, even out the demand, standardize the specifications, shore up the deficiencies, and rationalize the inequities inherent in the multi-jurisdictional arrangement.

50. Such problems can and hopefully will be avoided in Alberta. That they have not loomed larger in Edmonton to date is owing to the fact that unified servicing control has been the general rule in the past. Plate No. 3 depicts the history of Edmonton's growth beginning in 1870. The large and far-sighted annexation of 1913 was undoubtedly a crucial step in promoting the orderly development of the city. For some forty years afterwards, the city had total jurisdiction over its area of expansion. The McNally Commission recommendation of 1954, which would have restored the post-1913 situation, was not implemented for Edmonton, and a series of smaller, somewhat piecemeal annexations ensued instead. They have never caught up with the full extent of urban development. The present divided responsibility for power supply and distribution within the urban area and within the city itself is an unfortunate result, and one which will get worse.
51. For the planner, divided jurisdiction over power is expected to exert great effect in the area of urban design. In no sense should this be considered a fringe area for discussion. "Ugliness is Not Necessary" was the theme of the late Governor General Vincent Massey in his keynote address to the joint Community Planning Association of Canada - American Society of Planning Officials Conference held in Montreal in 1955. His direct and powerful message heralded a renewed consciousness of aesthetic values which had been largely overlooked in the early attempts to cope with the post-war building boom. In consequence, the past thirteen years have witnessed increased attention to the qualitative as well as quantitative aspects of urban development.
52. As much as anything else, overhead power lines detract from the grace of our cities. The City of Edmonton, which can be fairly said to be among the leaders in concern for civic design, has long been aware of this fact, and has been willing to go to extra lengths to forestall overhead wires in residential neighbourhoods. The remaining above ground lines in the City's distribution system are being phased out over the long run. The initiative taken by the City to secure an underground system for new development



in the Patricia Heights and Westlawn subdivision in Jasper Place is illustrative of the point. As these two areas are within Jasper Place they are to be serviced by Calgary Power until 1968 (Patricia Heights) and 1969 (Westlawn). Inasmuch as it would be normal for Calgary Power to install above ground residential service and a standard of street lighting below that adopted by the City (wood poles, open fixtures, low intensity), negotiations were completed whereby the City designed and constructed the system and then leased it to Calgary Power until the franchise was taken over.

53. However, that such arrangements may not always be possible is demonstrated by what may be conveniently termed "The Hermitage Construction Case" of 1961. In that circumstance, Calgary Power Ltd., applied for and obtained from the Public Utilities Board, pursuant to the Expropriation Procedures Act an expropriation order for a right-of-way for a transmission line north of the Clover Bar Bridge, on an alignment which closely approached a tract owned by Hermitage Construction and planned for future residential development.
54. The right-of-way required by Calgary Power covered an area of 18 acres. As Plate ID illustrates, the line was an extension from the Calgary Power substation to a perimeter line 5 ½ miles directly north. Extending north on the section line the overhead power facility crosses the North Saskatchewan River onto land owned by Hermitage (Maclab). Running for a distance of 3700 feet, the power line then crosses back to the "east" side of the River. The land uses in the area south and east of the River are industrial. The land on the north side was zoned metropolitan recreational and above the valley floor the area was zoned Agricultural-General Urban Reserve, i.e., land to be held in reserve for urban development (other than industrial) within the next 5 to 15 years. It was the submission of Maclab in 1961 that abutting lands were to be used for recreational and residential purposes and that a preferable alignment would require that the power line remain on the east side of the River and be constructed through an industrial area. In 1966 hearings were held before the Public Utilities Board on the

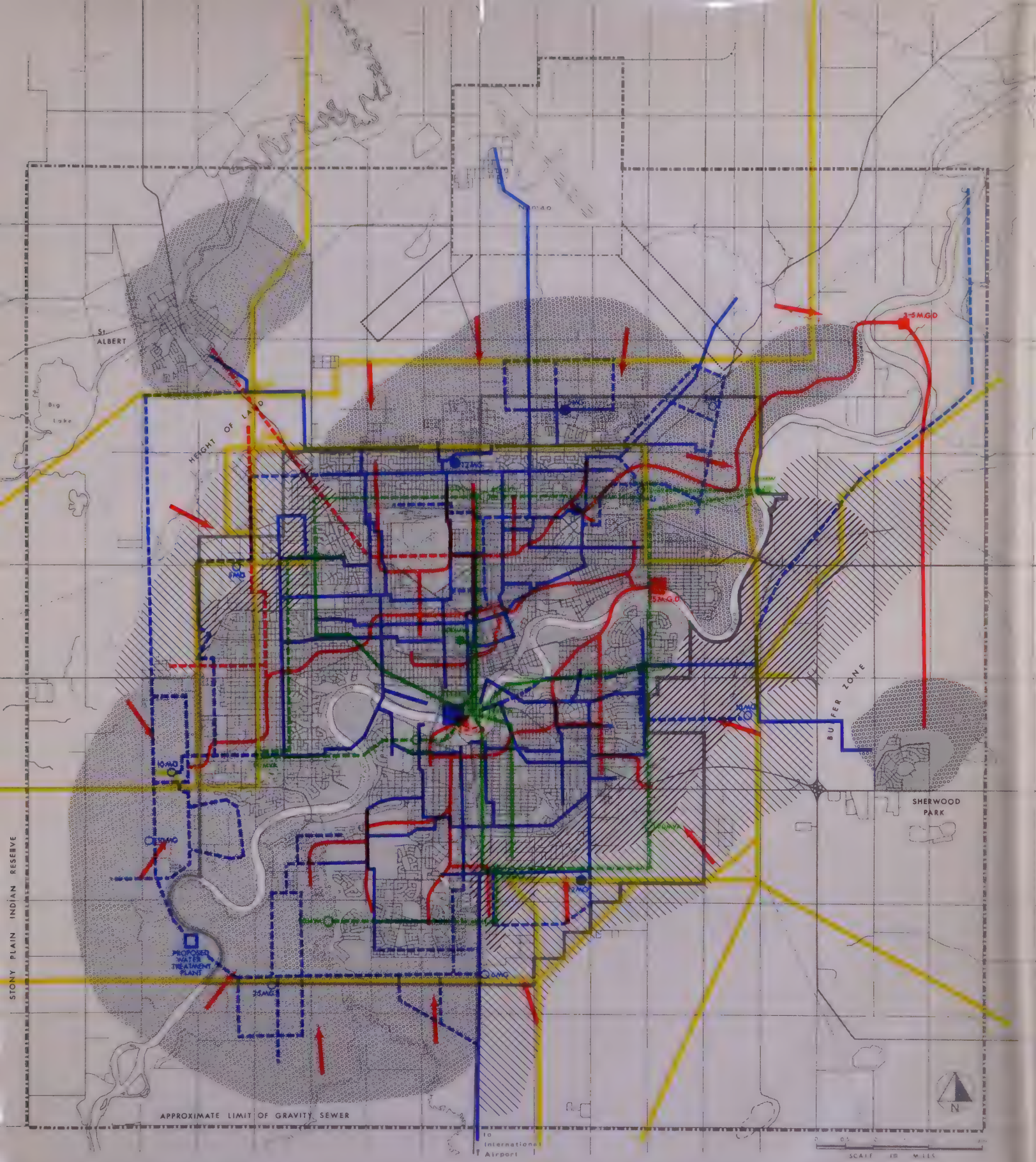


value of the land expropriated, and the injurious affection resulting from the overhead high voltage line. The Board decided that some damages did accrue to the adjacent Maclab property from which the high voltage towers were visible.

55. It is clear that the selection of that alignment would be incompatible with the urban design objectives which have since been enunciated in the General Plan, wherein concern for visual amenity in the residential environment is particularly stressed. An alternative route through the industrial district on the opposite side of the river would undoubtedly be proposed by the City Planning Department if the same issue arose within the city limits today. There was then, and there remains no way in which the City could intervene before the event, and the transmission line was installed. Given City jurisdiction over the distribution of power, it is evident that the principles of the General Plan would be adhered to.
56. In several other areas of Jasper Place it has been the practice of the City, when constructing new major roadways, to upgrade the standard of street lighting, for example, 111th Avenue from 149th to 154th Street. It is this difference in standards which is cause for concern. City Council can effect the desires of the community as to matters of aesthetics and standards of power transmission and lighting when the power system is a municipal utility. There are substantial extra costs involved in installing a substandard system and 10 years later replacing that system to standards desired by the community.
57. These examples also furnish further evidence of the inter-relationship between all legislation affecting the growth and development of the City, legislation affecting planning, roads, utilities, schools, etc. In these instances, legislation affecting electric power relates through the Planning Act to the urban design provisions of the City's General Plan.

58. Of far broader potential impact is the effect of electric power legislation on the whole machinery for the implementation of the General Plan through the provision of essential utilities. It has been the theme of this section that power supply and distribution is inseparable from other utilities in the sense that it is part of the total package of essential services which must be made available in a co-ordinated way if a great city is to be built. This section therefore concludes with a strong plea for consideration of the impending electric power legislation not as an isolated bill, but rather in the context of the total spectrum of legislation governing the growth and development of urban areas.





**Plate 1 Edmonton Urban Area 1968-2000**

- City of Edmonton
- - - Edmonton Metropolitan Area
- 1968 residential development
- 2000 industrial development
- 1968
- 2000

**Plate 1A Trunk Water System**

- existing major water lines
- - - proposed major water lines
- existing reservoirs
- proposed reservoirs

**Plate 1B Trunk Sanitary Sewer System**

- existing main interceptors
- - - future service

**Plate 1C Edmonton Power Trunk Distribution System**

- existing power lines and substations
- - - proposed power lines and substations
- existing generating station
- proposed generating station

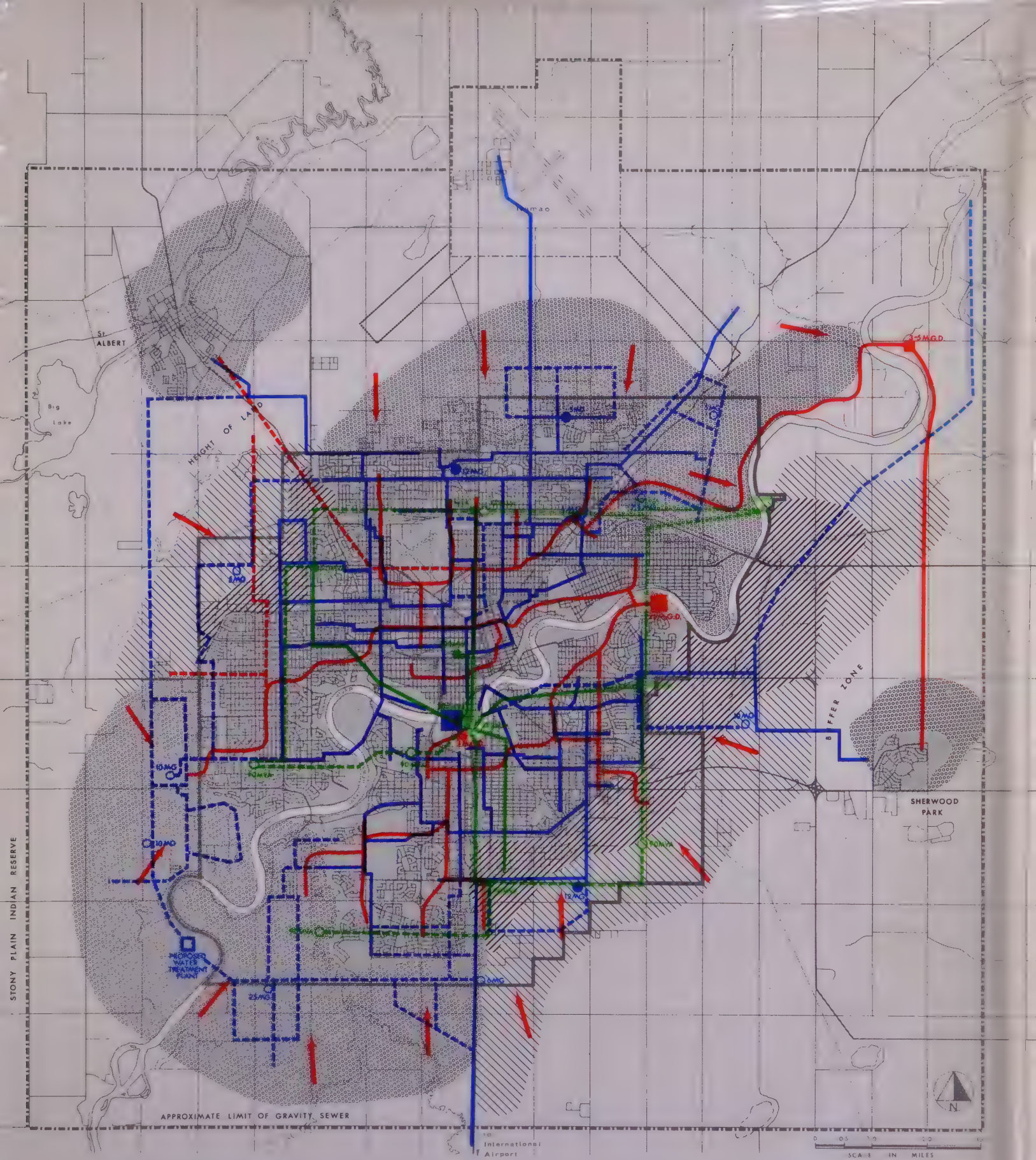
**Plate 1D Calgary Power Trunk Distribution System**

- existing power lines and substations

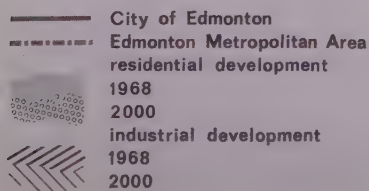


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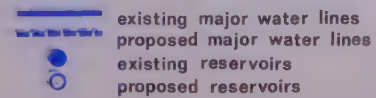




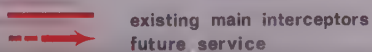
**Plate 1 Edmonton Urban Area  
1968-2000**



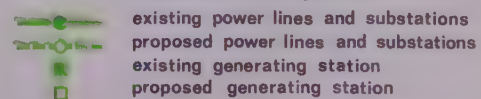
**Plate 1A Trunk Water System**



**Plate 1B Trunk Sanitary Sewer System**



**Plate 1C Edmonton Power Trunk  
Distribution System**



**Plate 1D Calgary Power Trunk  
Distribution System**

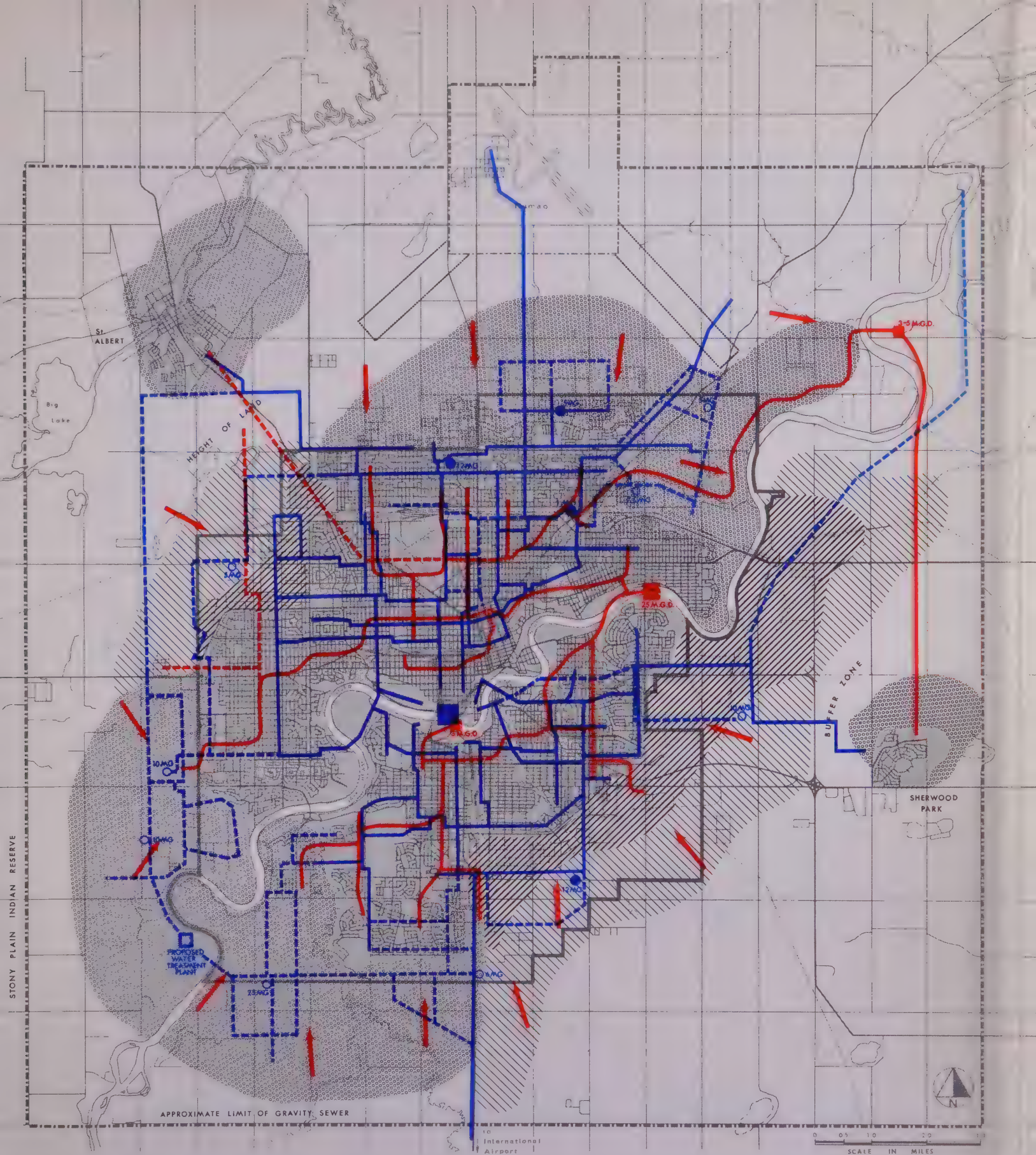




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- existing main interceptors
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- existing power lines and substations
- - - proposed power lines and substations
- existing generating station
- proposed generating station

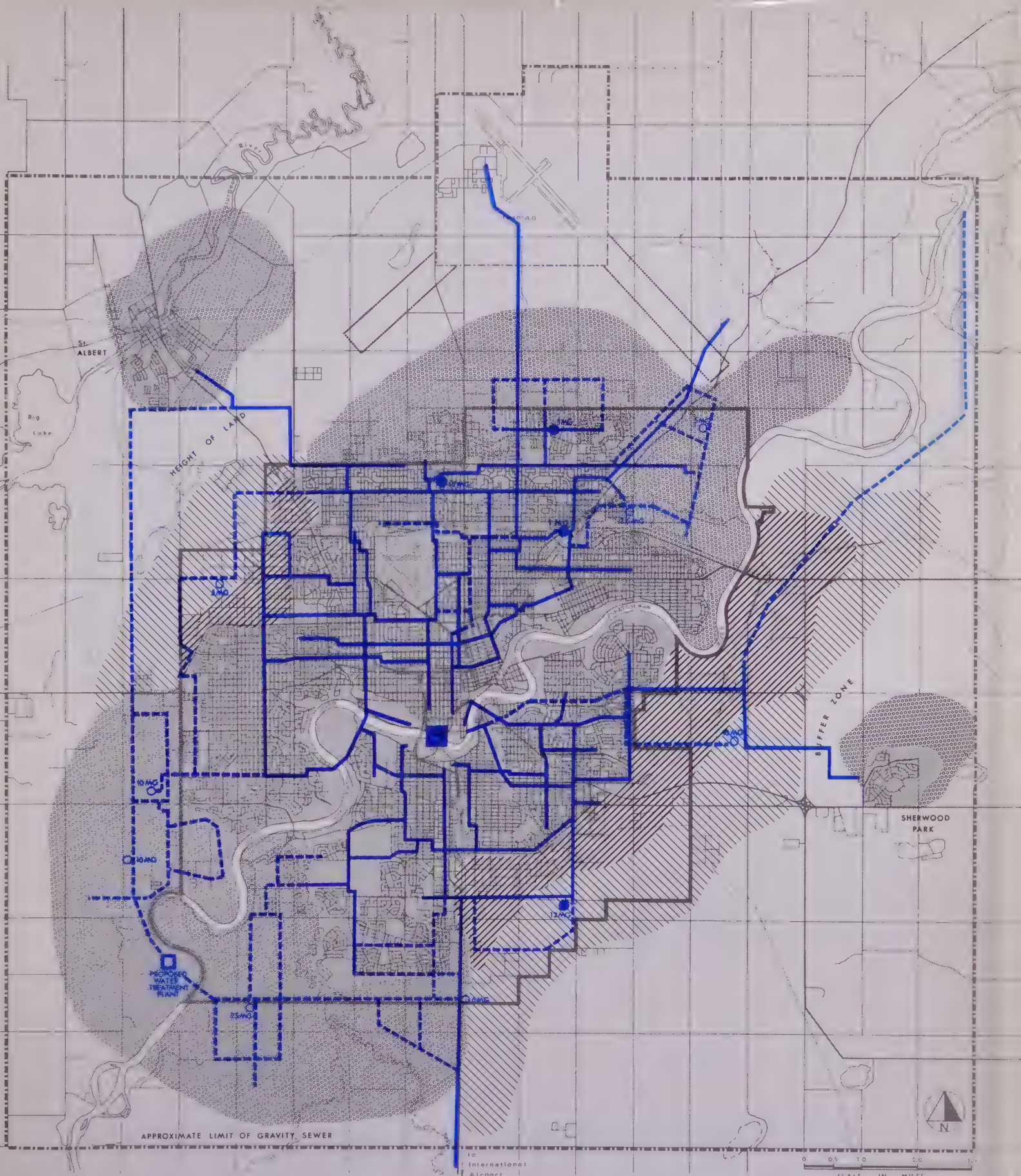
**Plate 1D Calgary Power Trunk Distribution System**

- existing power lines and substations

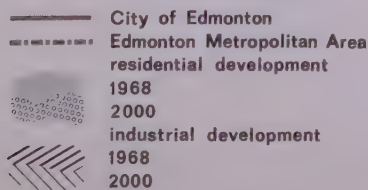




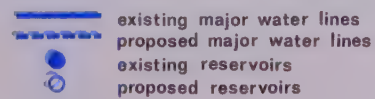




**Plate 1 Edmonton Urban Area 1968-2000**



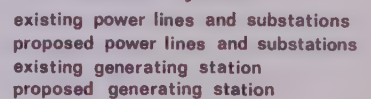
**Plate 1A Trunk Water System**



**Plate 1B Trunk Sanitary Sewer System**



**Plate 1C Edmonton Power Trunk Distribution System**

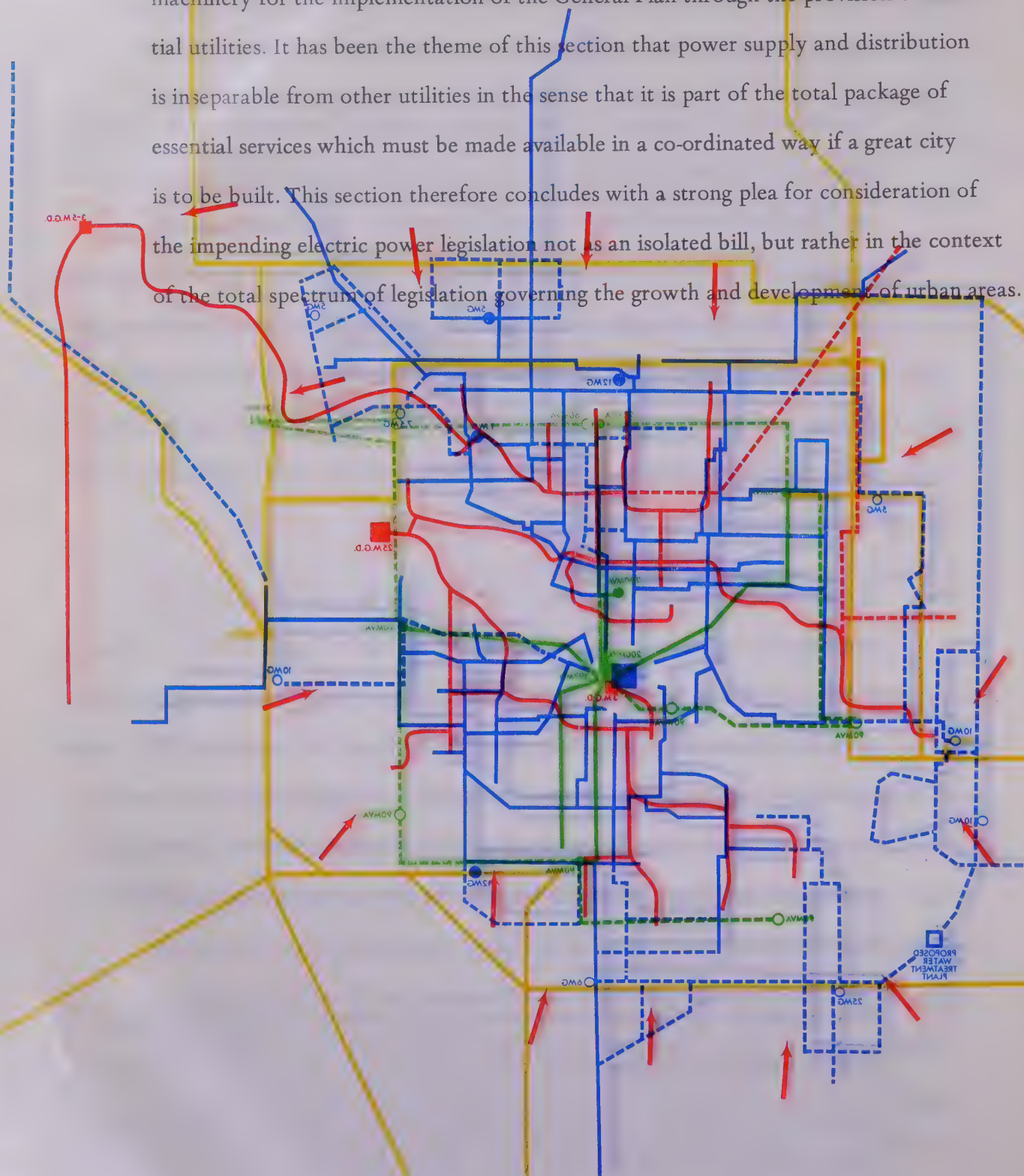


**Plate 1D Calgary Power Trunk Distribution System**





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- residential development 1968
- 2000
- /// industrial development 1968
- /// 2000

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Distribution System**

- existing power lines and substations





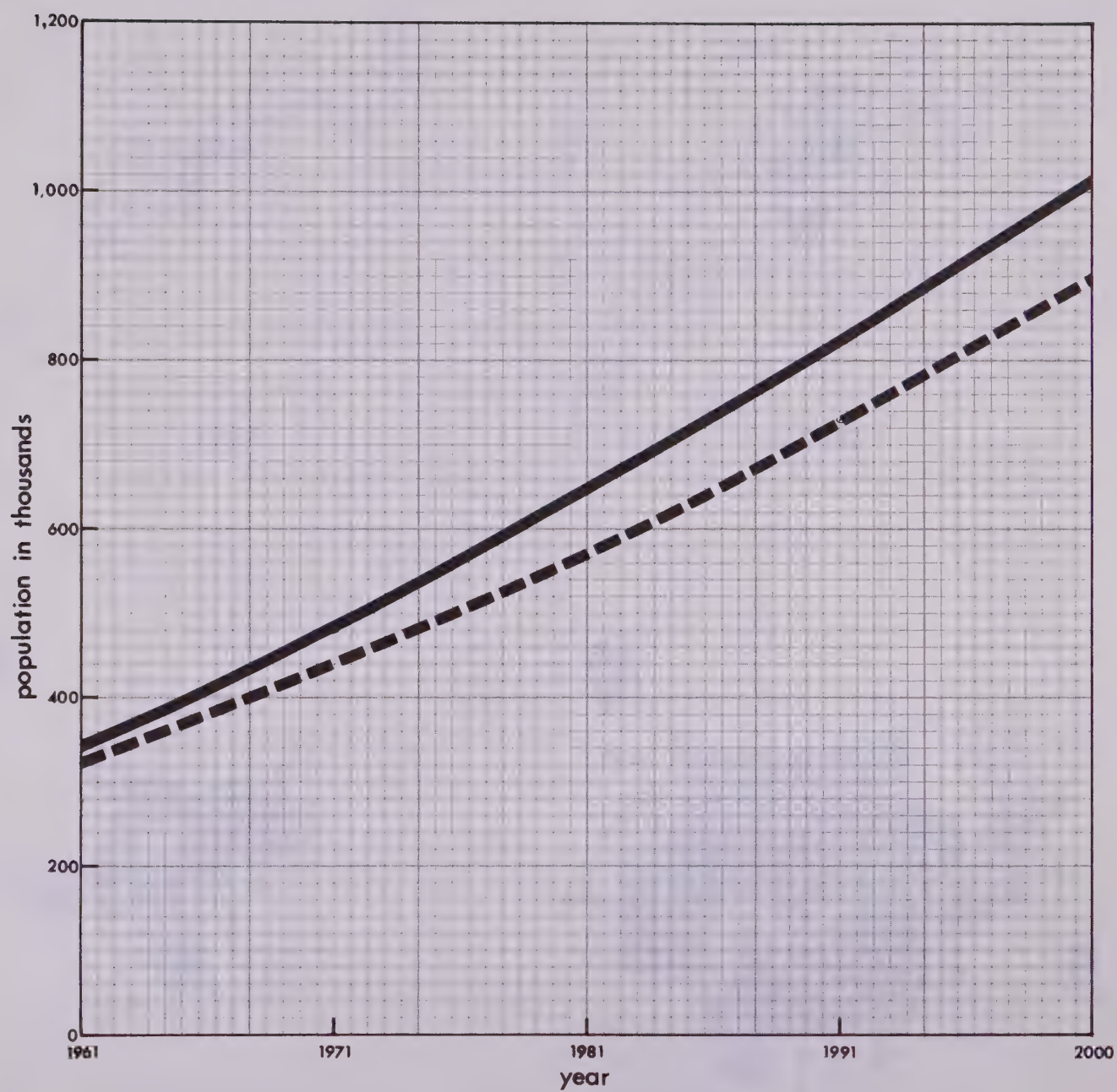


Plate 2 Population Growth Projection To The Year 2000

--- City of Edmonton

— Metropolitan Area



St.  
ALBERT



1902

St.  
ALBERT



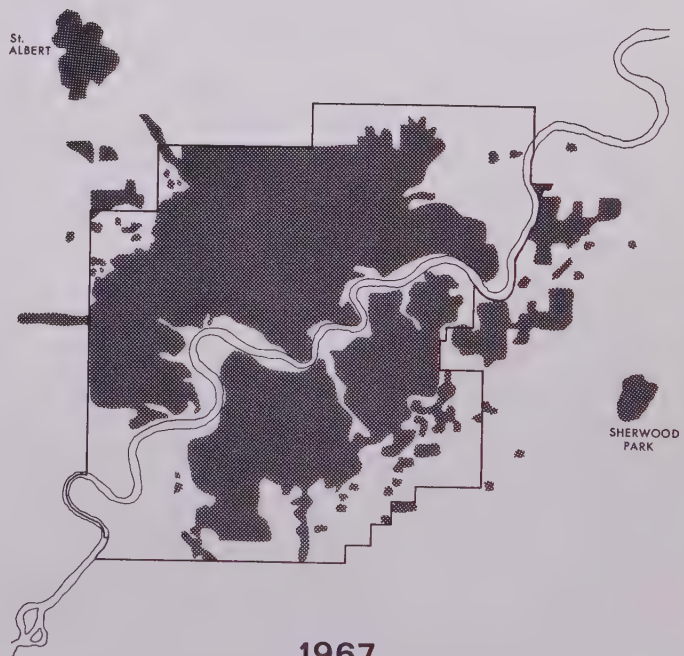
1913

St.  
ALBERT



1947

St.  
ALBERT



1967

SHERWOOD  
PARK

Plate 3 Edmonton Urban Area Historic Growth Pattern







*SUBMISSION BY DR. E. J. HANSON*



SUBMISSION TO  
THE SPECIAL ADVISORY COMMITTEE  
RE JURISDICTIONS  
IN THE GENERATION AND DISTRIBUTION  
OF ELECTRIC POWER  
IN THE EDMONTON METROPOLITAN AREA

E. J. HANSON  
EDMONTON, ALBERTA  
JULY, 1968





## A. INTRODUCTION

This submission deals with the staggering fiscal problems of the urban municipal area in the Edmonton metropolitan community and the relationship of the power utility thereto. The principles involved are applicable to all developing metropolitan urban areas.

The Edmonton Metropolitan Area, consisting of the City of Edmonton, the dormitory residential centres of St. Albert and Sherwood Park, the constituent industrial area in Strathcona County, and the dependent intervening land, comprising some 300 square miles centred about the City of Edmonton, like all urban municipal areas in Alberta and throughout Canada, faces a shortfall of revenues to expenditures of tremendous magnitude. The severity of this urban crises threatens the progress, and even the stability, of the social, economic, and political life of these areas.

Growth of the urban areas cannot be stopped, and therefore, in the public interest, it is necessary that such growth be organized constructively. The growth of the population and economic functions of the Edmonton Metropolitan Area, as well as of many associated activities, demands that in the future there be some type of co-ordinated local municipal government, so that the needs of the public be met effectively.

This local municipal government, no matter what form it may take, will have the duty to co-ordinate and plan the expenditures and revenues of the total area. It must control the provision of services and the provision of a rational system of budgeting. It must counter the shortfall of revenues to expenditures.

It is the writer's opinion that the urban fiscal crisis is of such a magnitude that no step should be taken that would make the functioning of this metropolitan government more difficult, and potentially impossible, in such a critical area. The danger of artificially limiting the jurisdiction over the provision of the power utility by the municipality cannot be over-emphasized.

It is submitted that the Special Advisory Committee should make no recommendation which would imperil the general public interest. The carving-up of the jurisdiction over power would damage and injure the fiscal capacity of the municipality by undermining its revenue base and by impairing its borrowing capacity as well, as is illustrated elsewhere in this brief, by obstructing proper planning and departmental operation. The municipality must have full jurisdiction over the power utility as its corporate boundaries may be from time to time. Any departure from this principle would erode the revenue base through the boxing in of the power utility, and it would result in much poorer fiscal planning at a time when there is a requirement for much stronger co-ordinated fiscal planning. The fiscal impact of the responsibilities of the municipality in the metropolitan area is of such great magnitude that the municipality requires jurisdiction over all utilities in the area, including the electric power generation and distribution system, which can augment the revenue sources of the municipality. The revenue base of the urban municipality requires broadening and not narrowing. It must have access to more revenue sources to be able to meet its responsibilities. Any limitation upon the jurisdiction of the electric power utility within the boundaries in the urban area would have a deleterious effect upon the fiscal capacity of the urban municipality.

It is the writer's opinion that the City of Edmonton should have exclusive rights with respect to all essential utilities in any area added or annexed to the City. This means that the City should have the option of conducting its own utility operations or of control by the grant of a franchise.

## **B. URBANIZATION OF ALBERTA**

Canada has experienced very rapid urbanization during the postwar period, at a rate that has exceeded markedly the rates in the United States and other developed countries. Currently about three-quarters of the Canadian population is living in urban centres, and the trend continues to be upward.

The rate of urbanization is even higher in Alberta than in Canada. Between 1951 and 1966, the urban population of Alberta increased by 125 per cent, compared to 69 per cent for Canada. This meant that between 1951 and 1966, the urban population of Alberta increased from less than one-half of the total population to more than two-thirds. Currently, only about one-quarter of the population of Alberta lives in rural counties, municipal districts, improvement districts and special area.

The population of the two metropolitan areas, Edmonton and Calgary, grew by 129 per cent 1951-1966. They have been, and continue to be, the most rapidly-growing metropolitan areas in Canada. Between 1951 and 1966, the population of the Edmonton Census Metropolitan Area increased from 177,000 to 401,000 while that of Calgary Census Metropolitan Area grew from 142,000 to 331,000. In 1951, the two metropolitan areas accounted for a little over one-third of the population of Alberta; currently, they have more than one-half. Most of the population growth in Alberta has occurred and will continue to occur in these two areas.

It is this high rate of urbanization which has laid the basis for the urban crisis. Where can the revenue be found to finance the rapidly-growing expenditure requirements induced by the population growth in the urban areas? Without adequate funds and recourse to a strong and versatile fiscal base, the urban municipality is paralyzed. The public interest demands that this question be resolved and that the shortfall of revenues to expenditures be met. The magnitude of this problem of finding millions upon millions of dollars is overwhelming urban municipal government.

Present revenue prerogatives of the urban municipalities must be preserved. Therefore, the power utility which provides the City of Edmonton with a profitable return from an efficient operation as well as strengthening its borrowing capacity must not be curtailed by an artificial boundary which does not consider the needs of the whole metropolitan community. Responsibility must be equated with the power to meet such a responsibility. The urban crisis of the shortfall of revenues to expenditures must be solved, and not accentuated. With this shortfall, it is fiscal folly to take away crucially-needed revenue sources which can be administered by the City



efficiently and equitably.

The City of Edmonton also needs to control its fundamental utility operations throughout the whole area of its political jurisdiction, as it may be from time to time, to enable it to provide uniformity of services throughout its area, and to secure fair and uniform rate structures for all citizens of the community.

### C. THE GROWTH OF THE EDMONTON METROPOLITAN AREA

This area is shown on the map at the front of the brief.

Between the 1961 and 1966 Census years, the population of the area in the City of Edmonton grew from 322,000 to 377,000, an increase of 17 per cent. The population of the outer metropolitan area increased from 21,000 to 30,000, a growth rate of 43 per cent. The population in the outer metropolitan area is increasing two and a half times as fast as that within the City of Edmonton. The whole metropolitan area had a population of 407,000 in 1966.

The City of Edmonton is expected to accommodate an increase in the population from 377,000 in 1966 to 570,000 in 1981, a rise of 51 per cent. The population of the outer metropolitan area is expected to increase from 30,000 in 1966 to 80,000 in 1981, a rise of 167 per cent. The indicated population growth for the whole metropolitan area is from 407,000 in 1966, to 650,000 in 1981, an increase of 60 per cent.

This metropolitan area is the basic and major community which serves Northern and Central Alberta, the Peace River country, and the Northwest Territories. It is the main residential centre, and it includes the chief industrial developments, storage depots, petrochemical and other plants, and the central pipeline network associated with the development of the petroleum industry in Alberta. The Edmonton Metropolitan Area is one integral and interdependent social and economic unit in which all the citizens have common public service and public utility service requirements.



The growth of the Edmonton Metropolitan Area has imposed many responsibilities upon the City of Edmonton which has had to provide rapidly-rising levels of public services of many kinds, with great spillover benefits in the outer metropolitan area and additional costs to the City.

The expenditure requirements have been relentless, and will continue to be even more so as the outer metropolitan area grows more rapidly than the central city. In providing public services which benefit the whole area the central city requires access to the whole revenue base of its jurisdiction including the utilities. As the population and economy of the Edmonton community continue to grow, the pressures of divided jurisdiction over the public utilities, and over the power utility in particular, become critical.

#### **D. PRINCIPLES OF URBAN MUNICIPAL GOVERNMENT AND ELECTRIC POWER JURISDICTION**

Several principles or criteria may be applied in determining the jurisdictions over public utilities in an urban area. The case at hand is that of the jurisdiction over electric power generation and distribution in the Edmonton Metropolitan Area. The principles are set out here as criteria for judging the requirements of good and effective urban governments, and the case of electric power utilities is related to each one of them.

The first is the principle of the socio-economic requirement in urban government. In general, it is desirable that the area of the local municipal government in a metropolitan area correspond closely to the area of the economic and social community. This is so because of the need for co-ordinated planning of traffic arteries to facilitate the journey to and from work, the provision of good school systems which meet the complex and specialized requirements of the whole urban area, the development of standardized and co-ordinated utility services, and the general provision of public services.

The existing system of government in the Edmonton Metropolitan Area does not meet this requirement. Residents in the area have common economic and social interests, but they have diverse local governments and public utility systems. The latter hinder the provision of adequate

government and utility services and the orderly development of the area. Inadequacies and disparities in local government and utility services, and in planning, have adverse long-term effects upon consumers and businesses in the area, and upon land use patterns.

The sawing-off and delimitation of the municipal electric power utility in the area cannot be regarded otherwise than as a retrograde step in the light of the principle of socio-economic intergration of local municipal government. It would worsen what is already a bad situation.

A second principle of urban municipal government may be termed the democratic or political requirement. The organization of local government in the metropolitan area should be such that functions delegated by the provincial government can be performed on a uniform basis throughout the area. This applies to both general government services and the public utility services. The structure of local government should be as simple as possible so that citizens understand it readily and can participate effectively in choosing appropriate services to be performed at adequate levels.

The existing system of government in the Edmonton Metropolitan Area also fails to meet this second principle. There are variations in public service levels throughout the metropolitan area. There are differences in the quality of public utility services, and in the public utility rates charged. Assessment and taxation procedures differ among the units. Thus, there are inequalities of services and taxation levels. Moreover, the present machinery of local government is not co-ordinated, residents of the metropolitan area must look to several governments and public utility systems for the provision of services. There is a fragmentation of citizen interest in local government.

With respect to the matter before the Special Advisory Committee, with electric power utilities, the political requirement calls for exclusive rights of the municipal utility within the area of the corporate boundaries of the municipality whatever the form of the urban municipality. To limit these rights is to fragment areas, jurisdictions, and citizen interest in democratic government, and to make the present situation worse generally. It would hamper decision making in the matter

of electric power distribution on the part of the citizens of the future in the area.

A third principle may be termed the administrative one. The local municipal government in the metropolitan area should be so organized that services can be provided efficiently, so that functions are integrated and co-ordinated administratively, so that qualified personnel and adequate equipment can be secured, and so that long-range planning can be undertaken under conditions of less uncertainty with respect to areas.

This criterion is not met in the Edmonton Metropolitan Area. At present, it is difficult to provide services efficiently throughout the metropolitan area. Agreements of various kinds have evolved in providing government and utility services. These introduce additional steps in the administrative process and retard the introduction of economies of scale which may be possible under an integrated urban government. Rural and town administrators are forced to struggle with problems which are essentially metropolitan urban in character, without the resource base to do so. Administration generally is weakened by uncertainties and lack of integration of planning for the whole area.

A decision to divide, split, and limit the jurisdiction of the municipal electric power utility within the metropolitan area would be a step toward the further weakening of the administration of the Edmonton area, with the deleterious effects upon administrative efficiency and co-ordination.

A fourth principle may be called the intergovernmental principle. Local government should be organized so that an equitable structure of provincial grants can be maintained, so that joint provincial-municipal services can be co-ordinated efficiently, and so that a maximum amount of local government autonomy can be secured.

This criterion is not met in the Edmonton Metropolitan Area. This community requires a balanced and strong tax base, and it requires jurisdiction over all essential and revenue-producing utility operations and services to enable it to be as autonomous as possible.



Any decision which limits the jurisdiction of the municipal electric utility in the Edmonton Metropolitan Area weakens the fiscal strength and local autonomy of the City of Edmonton and of the other municipalities of Edmonton Metropolitan Area, increasing their dependence upon provincial grants and upon provincial direction of local government and policies relating to urban public services.

Finally, a fifth principle, which in various ways contains, and is interwoven with, the previous ones, is the fiscal principle. Urban local government should be organized in such a way that it can make the best and fullest use possible of the whole metropolitan tax and revenue base, including the profit-making public utilities. A strong fiscal base is required for the whole metropolitan area so that it can provide adequate and uniform levels of service throughout the area, a uniform mill rate throughout the community, and so that efficient fiscal planning and budgeting procedures can be adopted. Differential mill rates are undesirable and unfair.

The fiscal requirements or principle is not met in the Edmonton Metropolitan Area. There are inequalities in local public services; the tax and revenue bases of the present local governments lack balance; the fiscal capacities of the local governments in the area differ. Budgeting is not co-ordinated since it is undertaken by a number of local governments more or less independently. Essential utility revenues are divided among local governments and private companies, instead of being determined centrally by one government. One municipal jurisdiction over all utility operations in the area is required to strengthen the fiscal base.

The fiscal principle is a focal point in the urban crisis of the shortfall of revenues to expenditures. It cannot be emphasized too greatly that no step should be taken which would endanger the ability of the urban municipality to meet the needs of its citizens. The carving-up of the electric power utility in the context of the whole fiscal situation would be a step against the public interest.

The principle of fiscal requirements is of such overriding and crucial importance, and the potential shortfall of revenues to expenditures is so great that further elaboration is desirable.



## E. THE FISCAL CRISIS OF URBAN MUNICIPAL GOVERNMENTS

Urban municipal governments have great difficulties in financing the services required in urban and metropolitan areas. There are various reasons for this.

First, there are limitations upon the municipal tax base. Cities have to rely mainly upon property taxes which are readily administered by local authorities, but which are not so responsive to income increases as other sources of revenue. The federal and provincial governments have more flexible, varied, and elastic sources of revenue such as the personal income tax, the corporation income tax, sales taxes, and other commodity taxes. They also have access to natural resource revenues. From the point of view of both equity and efficiency, these sources of revenue are best administered and collected by governments with wide jurisdictions. The city urban governments are left with relatively narrow, inflexible revenue sources.

Second, the expenditure requirements for public services in metropolitan areas and major cities are higher than in smaller centres and in rural areas. Complexities arise in large centres, which do not exist in small ones. Various new services have to be provided, and various old services cost much more in the urban setting, because of the fact that many people have decided to do business and to live in concentrated areas.

A third aspect is that, although large urban centres have most of the high-income people in the country, they also have a disproportionately large number of low-income people. This leads to a need for improved public service programs, and expanding expenditures for education, welfare, health, and other purposes. It also puts a restriction on the use of the property tax levies to raise more revenue since property taxes are regressive.

The end result is that urban municipal governments have rapidly-expanding expenditure requirements and narrow and inelastic revenue sources. This creates a continuing fiscal imbalance or crisis, unless the shortfall of revenues to expenditures can be met from sources other than the regressive property tax.

In the case of Edmonton, utility surpluses provide a substantial revenue. An urban municipality which has exclusive jurisdiction over its own utilities has much additional fiscal strength and flexibility in fiscal policy. Hence, it is advantageous and necessary for there to be one control over the essential utilities in the Edmonton Metropolitan Area. They make it possible to reduce the reliance upon regressive property taxes. The rapidly-expanding municipal expenditure requirements lead to a need for a strong revenue base. The more utility revenue, the less the municipality has to depend upon provincial grants. Any reduction in the municipal jurisdiction of the electric power utility will mean greater reliance upon provincial grants, property taxes, or whatever other revenue sources they may be given. The latter generally involve great administrative difficulties and differentiation of tax treatment of individuals within the area.

In the case of Edmonton, the electric power utility is capable of generating substantial revenues at reasonable rates. It provides a practical and efficient revenue source which should not be lost. Any decision to limit the jurisdiction of this utility in the Edmonton Metropolitan Area will make the shortfall in finances even greater, increase the fiscal imbalance, and impair the credit standing of the municipality.

#### **F. THE SHORTFALL IN REVENUES TO EXPENDITURES**

The writer has made very detailed studies of the expenditures of the City of Edmonton for the period 1951-66, and projections of expenditure requirements to 1981 have been made on the basis of these studies and by reference to trends in the Alberta and Canadian economies.

During the period 1951-66, the per capita expenditure of the City of Edmonton, including municipal functions and tax levies for school purposes, increased at an average annual rate of nearly 6 per cent. For the period 1966-81, the writer has assumed a deceleration to an average annual rate of increase of about 5 per cent, and it is assumed that the provincial government will provide close to two-thirds of the total school expenditure requirements by 1981. If the provincial government does not increase its school contribution to this extent, the rate of growth of City expenditures will be even greater.

The total expenditure of the City of Edmonton in 1966, on the basis of its financial statements, was \$67.2 million, or \$178. per capita. This includes \$46.7 million for municipal functions performed by the City, and \$20.5 million for education tax levies.

Projecting for the period 1966-81, the expenditure per capita in 1981 becomes \$365. This implies an annual average rate of growth of a little over 5 per cent. The total expenditure requirements for 1981 are \$208 million, of which \$145 million is for municipal functions and \$63 million is for education.

The shortfall of revenue to expenditure for the period 1966-81 is the difference between \$208 million and \$67 million, of a total of \$141 million of additional annual revenue which must be found by the City to meet projected requirements in the year 1981. On a per capita basis, the shortfall is the difference between \$365 and \$178, or \$187 per capita. This shortfall comes up every year. Can the property tax be saddled with all this additional requirement for funds?

Considering the metropolitan community in the years between 1966-81, the shortfall will become even greater than the indicated \$141 million. Assuming the same per capita levels of expenditure for the additional 80,000 population projected for 1981 the shortfall increases by about \$30 million. After allowing for the provision of an urban level of services throughout the whole metropolitan area, the additional shortfall becomes close to \$35 million. The total shortfall for the metropolitan area becomes more than \$175 million. If the provincial contribution to education falls short of two-thirds of the expenditure on the school systems, the total shortfall will be even greater.

This is the task facing the City of Edmonton, of how to meet these huge expenditure requirements in the years to come. They have to rely mainly upon property taxes and utility rates to meet the requirements, along with increasing assistance by the provincial and federal governments. It is desirable and necessary to permit the City of Edmonton to retain complete jurisdiction over its electric power utility to help it to fill the great shortfall of revenues to expenditures.



## G. CONCLUSIONS

The writer's opinion is that the municipal government of the Edmonton Metropolitan Area, whatever form it may take, should have exclusive rights with respect to the provision of utility services in the total corporate area, whatever it may be. This principle has been accepted without dispute in the Edmonton area, to the best of the writer's knowledge, with respect to the fundamental utilities, like the transit system, which are unable to recover sufficient revenue from operations to cover all the expenditures. The City treasury has to make up the deficits as a matter of social policy and of providing an adequate transportation service in the City area. The City should be entitled to balance some of its operations which must run on a deficit with those that have traditionally operated at a profit. In the case of water, the City provides it, by agreements, through the metropolitan area.

The principle of exclusive rights in annexed areas should apply to all essential utilities, in the interests of flexibility and strength in the fiscal base of the municipality of ensuring soundness of planning, and of ensuring uniformity of prices throughout the community.

The electric power utility is of crucial importance in financing the rapidly-growing expenditure requirements of the City. Its contribution to City revenues provides an alternative to property taxation (such contribution is shown elsewhere in this brief), within the limits of rates being fair and reasonable.

All substantial sources of revenue open to the City tend to be regressive. Both property taxes and utility rates tend to be regressive. This applies with greater force when the utilities are privately-owned, for then City residents have to bear a greater combined burden of utility rates and property tax rates because of lower utility contributions to the City treasury, although the same rates may be charged by the privately-owned utility.

In the case of electric power generation and distribution, the City of Edmonton has a long period of experience going back to the turn of the century of providing the citizens with



excellent service at reasonable rates. It is highly desirable that both the generation and distribution systems operate in conjunction with other essential municipal services over the same areas in the interests of long-range planning and short-range implementation.

The revenue contributions of the electric generation and distribution systems operating throughout the whole metropolitan area, would facilitate the process of adjustment toward improved, more co-ordinated, and more efficient government services and planning in the metropolitan community. Contiguity of the municipal electric power system, with the area of the municipality, whatever it may be, would provide uniformity of electric power services and rates throughout the area, and thereby uniformity in the mill rate for property tax.

In addition, the municipal electric power system is required to help in meeting the tremendous shortfall of revenue to expenditure facing the Edmonton area in the public municipal sector. Any limitation upon the rights of the municipal urban government with respect to the electric power utility would intensify the defects in the present local governmental structure of the Edmonton Metropolitan Area, and would have hurtful and detrimental effects upon the fiscal strength and visibility of the urban municipal government in the area.

The writer believes that the electric power generation and distribution systems be granted exclusive rights to any organization or change in municipal government in the Edmonton Metropolitan Area. Fair and reasonable compensation should be provided for the private utility, in the case of the areas in which it is operating currently, and adequate periods of transition from the private utility operations to Edmonton Power operations should be worked out.



**J**

*SUBMISSION BY DR. V. SALYZYN*





SUBMISSION TO THE  
SPECIAL ADVISORY COMMITTEE ON  
THE POWER COMMISSION ACT

PREPARED BY  
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AUGUST, 1968

- I. Introduction.
- II. Projection of Revenues for the Edmonton Metropolitan Area.
- III. The Fiscal Impact of Electrical Power Operations.
  - A. Magnitude and Effect of Revenue Loss to Municipality
  - B. Principles of Fiscal Equity.
  - C. Fiscal Equity and the Property Tax.
  - D. Fiscal Equity and Electrical Power Utility Revenues.
- IV. Conclusions.



## I. INTRODUCTION

This submission places emphasis on the future fiscal impact of power utility operations on the municipal revenue structure within the Edmonton Metropolitan Area (as illustrated on the map at the front of the brief) and takes the position that in the public interest Edmonton Power should have exclusive rights with respect to power utility operations in any area with which the City may become merged.

The procedure used to arrive at this conclusion is to make projections of the revenues that would be available to finance the required public services provided in the Edmonton Metropolitan Area in the future under the two alternative conditions: (1) areas merged with the City would be supplied power by Edmonton Power, or (2) areas merged with the City would not be supplied power by Edmonton Power.

Projections of the revenue structure are made for the years 1971, 1976 and 1981 for the Edmonton Metropolitan Area. This area is that identified in previous submissions. The analysis based on this area is performed to provide the Special Advisory Committee with a projection of the magnitudes of revenues and expenditures that are involved in such a metropolitan area whatever the form of local municipal government may be and whatever the exact boundaries may be for such government.

Projections of the property tax and other revenues for the Edmonton Metropolitan Area are made on the assumption that the power boundaries will correspond to the corporate limits in existence at the time. These projections are then compared to the revenue structure that would exist if Edmonton Power lost the rights to supply electrical power within the outer area. The comparison takes the form of analysing the fiscal effects on residents within the entire Edmonton Metropolitan Area under the condition that power utility revenues are used to reduce the burden of the property tax. Also, the effects on residents located within the outer area are compared to those within the present corporate limits of the City of Edmonton. It is submitted that these comparisons reveal quite clearly that fiscal equity and the public interest would be best served if the right to

supply electrical power were not deprived the local municipal government, whatever the extent of of its jurisdiction may be.

## **II. PROJECTION OF REVENUE FOR THE EDMONTON METROPOLITAN AREA**

The projections of the revenue structure for the Edmonton Metropolitan Area are based on the fiscal experience of the City of Edmonton during the past ten years. It is assumed that the Edmonton Metropolitan Area will have the same tax and revenue structure as the City of Edmonton. The projection of any modifications arising from policy changes or from any phasing-in period are outside the scope of this submission.

The best approach for making medium and long term projections is to relate past performance to a limited number of the simplest and most generalized economic and demographic variables available. The projections made here are based primarily on the relationship of the various sources of revenue to the level of total personal income and to the size of the population. Personal income and population are chosen because they are closely related to revenues and are relatively simple to measure and easy to predict. Ultimately, all municipal revenues must come from income. As income rises, so does the ability of the municipality to raise revenues. Consequently, many revenues are directly related to levels of personal income. Other revenues, however, may be more closely associated with the number of people that contribute to revenues.

Some revenues, however, are not sufficiently related directly to either the population or the level of personal income. The property tax is an example of this. This tax is subject to frequent rate and assessment adjustments. Furthermore, because the property tax functions as a residual source of municipal funds, revenue from it will not be explicitly projected. It will be assumed, consistent with general practice, that property tax revenues are used to fill the gap between total expenditures and all other sources of revenue.



Revenues that are predictably related to either population or personal income were grouped on this basis and converted to per capita revenues or to revenues per \$1,000 of personal income respectively. Projections of trends of past performance were then made of these averages by the straight line least squares method. <sup>(1)</sup>

For projection purpose, the revenues from public utility operations are divided into (1) the profits allocated to general revenues and (2) the five per cent levy on gross revenues. Also, the utilities that have consistently added profits to general revenues are separated from those that have been continually subsidized.

Gross revenues from utility operations were projected on the basis of their relationship to population changes. Estimates of the five per cent levy on gross revenues were based directly on these projections. Profit contributions were also based on these gross revenues projections but in a more complex manner. Utility profits are dependent on many variables not only difficult to predict but often not easy to recognize, such as technological innovations, shifts in demand and changes in pricing policies. The contribution of utility profits to city revenues have shown no readily recognizable pattern during the past ten years other than a general upward trend. However, through the combination of physical operations and the accounting and pricing policies followed during the past, total profits from operations (as distinct from profits allocated to general revenues,) have been kept at a relatively predictable average proportion of gross revenues.

Following the procedures outlined, the estimated revenues of the Edmonton Metropolitan Area (assuming power boundaries are the same as corporate boundaries) are projected in millions of dollars to be as follows:

(1) *The least squares method assures the best fitting straight line to a series of points on a graph by accomplishing two results. First, the sum of all vertical deviations of the points from the straight line is equal to zero. Secondly, the sum of the squares of all these deviations are at the minimum. This second result automatically assures the first. This approach assumes the deviations in any year from the straight line arise merely by chance and that a long-run trend does in fact exist. The least squares method simply identifies this trend accurately.*

YEAR	TOTAL REVENUE REQUIREMENTS	PROPERTY TAX	POWER UTILITY REVENUES	ALL OTHER REVENUES
1971	\$122.2	\$59.9	\$8.7	\$53.6
1976	178.4	87.6	12.5	78.3
1981	241.5	117.8	16.7	107.0

The total revenue requirements are based on projections of expenditures made by Dr. Hanson in preparing his submission. Power utility revenue projections were made by Edmonton Power.

### III. THE FISCAL IMPACT OF ELECTRICAL POWER OPERATIONS

#### A. MAGNITUDE AND EFFECT OF REVENUE LOSS TO MUNICIPALITY

Projections of power utility revenue contributions to general revenues were made for both the Edmonton Metropolitan Area and for the City of Edmonton. The amounts, in millions of dollars, projected for the years 1971, 1976 and 1981, were as follows:

YEAR	EDMONTON METROPOLITAN AREA	CITY OF EDMONTON	OUTER AREA
1971	\$8.7	\$7.2	\$1.5
1976	12.5	9.5	3.0
1981	16.5	12.5	4.0

Since the property tax is treated as a residual between total expenditures and all other revenues, revenues lost by Edmonton Power not operating in the outer area would increase the burden of the property tax in the Edmonton Metropolitan Area by \$1.5 million in 1971, \$3.0 million in 1976, and \$4.0 million in 1981. These amounts are approximately \$10.89, \$18.65 and \$21.54 per household respectively. Over the 1968-81 period, these losses would total \$49.4 million or \$307.10 per household.

## B. PRINCIPLES OF FISCAL EQUITY

Apart from the fiscal effects that the reduced revenues from power utility operations would have on increasing the overall tax burden of the residents of the Edmonton Metropolitan Area, additional undesirable effects would arise through decreased fairness or equity of the revenue structure. Our society has accepted several general principles of fiscal equity which can be used to analyse the effects of lower power utility revenues and increased property taxes.

Fiscal equity involves the application of standards based on value judgments about the justice and fairness of government expenditures and revenues. Scientific validation plays no part in the setting of these standards. Fiscal equity is not as much a concept as it is a statement of a consensus of opinion. The expenditures and revenues that are fair and just are those that our society accepts as being fair and just.

There are two useful guidelines that have been established for analysing the criteria for fiscal equity. These are: (1) the economic well-being of the individual, and (2) the relationship of the services received by the individual to his contribution. The application of these principles to the revenue structure involves, in the first case, the individual's ability to pay for government services, and in the second case, the degree of correspondence between the benefits received by the individual and the amount of his payment for them. The first of these deals with the revenues independent of government expenditures, while the other attempts to relate revenues directly to expenditures.

The principle of ability to pay traditionally evolved to mean that persons with equal incomes should make equal contributions to the support of government expenditures, and persons with greater income should make greater contributions. Ability to pay is considered to rise even more rapidly than income requiring a progressive revenue structure, in which case, contributions to government are expected to increase as a per cent of income as income rises.



The benefit principle has its genesis in the business sector where it is considered to be inherently “fair” that individuals pay for all the goods and services they receive. The application of this principle means that the contributions to the government are tied directly to benefits received. The value of the benefits received is usually measured by the governmental cost of providing these services.

The difficulty of establishing fiscal equity is greatly increased by the fact that the actual contributions to government in the form of taxes or fees may not represent the true ultimate burdens. The pattern of revenue payments is altered through a process of shifting which can substantially alter the final or ultimate incidence of the burden. Shifting takes place through the mechanism of supply and demand in the market and occurs as the result of changes in prices. The degree of shifting is influenced by such variables as the market structure, responsiveness of demand to price changes, cost conditions of the producers and the type and geographic location of the revenue source. This makes the analysis of the concept and the measurement of revenue shifting and final incidence a complicated and difficult procedure.

### **C. FISCAL EQUITY AND THE PROPERTY TAX**

Who actually bears the burden of the property tax? Who should bear the burden of the property tax? These are the questions to be answered.

First, who actually bears the burden of the property tax? To answer this question of tax incidence it is necessary to identify the ultimate bearer of the tax burden by looking at the initial payment of the tax and making adjustment for any shifting that may have occurred in the process. Most experts of property tax shifting and incidence agree that occupants of residential property, whether owners or tenants, bear the burden of the tax levied on residential property. The owner-occupant is not able to pass his payment of the tax on to anyone else for he has little opportunity to raise the price of anything he sells; whereas, the landlord passes the burden on to the tenant in the form of higher rent. The non-residential property tax is normally shifted in the form



of higher prices charged to the residents of the area in their role as consumers. <sup>(2)</sup>

In addition to classifying the different components of the property tax according to shifting assumptions, it is also necessary to classify the residents of the Edmonton Metropolitan Area before it is possible to determine who actually bears the burden of the tax. The residents may be classified by a variety of conceivable attributes, but the most relevant one for fiscal equity is the income level of the family.

The estimated burden of the property tax has been calculated for the residents of the Edmonton Metropolitan Area by income class for the years 1971, 1976 and 1981 and is found to be very regressive, that is, the per cent of income used to pay the tax decreases very rapidly as income increases (see column 2 of table 1).

Who should bear the burden of the property tax? Given the generally accepted criteria of fiscal equity, the choice is between ability to pay and the benefit principle.

Although the evidence is not decisive, most experts agree that some portion of the property tax can be justified on the basis of the benefit principle. <sup>(3)</sup> Services to property, such as some of the costs of providing police and fire protection and public works are an example.

One generally recognized application of the ability to pay principle is reflected in the structure of the federal personal income tax. This can be compared to the assumption that the ability to pay criterion would be satisfied by a tax proportional to income. Under either of these criteria, the property tax is obviously inequitable.

(2) For a detailed discussion see particularly, Dick Netzer, *Economics of the Property Tax*, Studies in Government Finance, The Brookings Institution (Washington, D. C., 1966); W. I. Gillespie, *The Incidence of Taxes and Public Expenditures in the Canadian Economy*, Study No. 2, Royal Commission on Taxation, (Ottawa, 1966); I. J. Goffman, *The Burden of Canadian Taxation*, Tax Paper No. 29, Canadian Tax Foundation, (Toronto, 1962).

(3) J. F. Due, *Government Finance: Economics of the Public Sector*, (Homewood, Illinois, 1968), p. 430.

#### D. FISCAL EQUITY AND ELECTRICAL POWER UTILITY REVENUES

A proper assessment of fiscal equity based on the alternative revenue positions presented by Edmonton Power having or not having rights to supply power in the outer area assuming merger of the Edmonton Metropolitan Area, requires the explicit recognition of the two aspects of equity: (1) equal treatment of individuals in like circumstances (horizontal equity), and (2) unequal treatment of individuals in unlike circumstances (vertical equity). The loss of rights to provide power in the outer area would not only reduce the revenues from this source (which would have to be replaced by other revenues), but would also discriminate as between those residents contributing to the revenues of Edmonton Power and those not contributing to general revenues in this manner as well as increase the overall regressivity of revenue contributions in the entire metropolitan area.

The estimate of the allocation of the net revenues of Edmonton Power to income classes, shown in Table 1, was calculated on the basis of the following assumptions made in line with those made for the property tax:

- (a) That portion of the electrical bill which represents the cost of providing power is a payment based on benefits received by the user of the electricity.
- (b) That portion of the bill which represents revenue allocations to general revenue is a payment based on the ability to pay principal.
- (c) The ratio of profits to gross revenues is the same for each customer of Edmonton Power.
- (d) Payments for electricity made by the occupants of residential property are ultimately borne by these occupants.
- (e) Payments for electricity used by non-residential establishments are passed on to households through higher prices in proportion to the distribution of their expenditures on consumer goods.

Further analysis, in which the distribution of the burden of the property tax and the revenues of the power utility are viewed from the alternative that the outer area would not be supplied electricity by Edmonton Power, shows that:

1. In the outer area, the property tax burden would be the same as for the area being supplied by Edmonton Power, (column 3 of Table 2 equals column 6), but since the burden through Edmonton Power would be less for the former (only the non-residential portion), the total contributions to general revenues made by the residents of the outer area would be less than contributions made by the remainder of the residents of the Edmonton Metropolitan Area (column 5 of Table 2 is less than column 8). This clearly violates the equal treatment of equals criterion of fiscal equity (horizontal equity).

2. Although the relative burden is lower for the residents of the outer area, the degree of regressivity is substantially greater for these residents compared to those residing in the area served by Edmonton Power (compare columns 2, 3 and 4 of Table 3 to columns 5, 6 and 7 of the same table). However, the regressivity is higher for all of the residents of the Edmonton Metropolitan Area than would be the case if the entire area was supplied electricity by Edmonton Power (compare columns 4, 5 and 6 of Table 1 to Table 3). This clearly aggravates the fiscal inequity already existing as viewed from the criterion of differential treatment of individuals in unlike circumstances (vertical equity).

#### IV. CONCLUSIONS

1. The loss of rights for Edmonton Power to supply electrical power in the outer area, assuming the merger of the Edmonton Metropolitan Area, means a loss of municipal revenues for the Edmonton Metropolitan Area. In common with other urban centres, the Edmonton Metropolitan Area cannot afford to lose any of its vital sources of revenue.

2. Given the demands for municipal services in the Edmonton Metropolitan Area, these lost revenues will have to be replaced by other sources. The availability of other sources of revenue is limited.

3. This means that the already heavily burdened property tax will have to be increased.

4. Since the property tax is more regressive than revenues from Edmonton Power, the substitution of the property tax for power utility revenues further increases the already regressive municipal revenue structure in the Edmonton Metropolitan Area.

5. Further inequity is created by the fact that some residents of the Edmonton Metropolitan Area by virtue of their location will contribute less than their fair share to the financing of municipal services.

6. On all these counts, assuming the merger of the Edmonton Metropolitan Area, whatever its form and extent, public interest requires that Edmonton Power not be deprived of rights to supply power to such Edmonton Metropolitan Area.

7. All these conclusions hold so long as at least the following two conditions are met: (1) Edmonton Power operations in the outer area yield revenues for the general fund, and (2) the property tax burden is more regressive than power utility revenues.



TABLE 1

INDEX OF INCIDENCE<sup>(1)</sup> OF POWER REVENUES AND THE PROPERTY TAX BY INCOME CLASS, POWER SUPPLIES BY EDMONTON POWER TO ENTIRE EDMONTON METROPOLITAN AREA PROJECTED TO 1971, 1976 AND 1981

INCOME CLASS (2) (1)	INDEX OF PROPERTY TAX (2)	INDEX OF POWER REVENUES (3)	WEIGHTED INDEX OF INCIDENCE OF (3) PROPERTY TAX AND POWER REVENUES		
			1971 (4)	1976 (5)	1981 (6)
\$3,000-3,999	100.0	100.0	100.0	100.0	100.0
4,000-4,999	82.4	98.8	83.5	83.4	83.4
5,000-5,999	73.3	86.2	74.9	74.9	74.9
6,000-6,999	69.4	88.1	71.8	71.7	71.7
7,000-7,999	64.8	76.8	66.3	66.3	66.3

- (1) The more rapidly that the index decreases as income increases, the more regressive is the incidence.
- (2) The index of incidence for both the property tax and the power revenues is based on a Dominion Bureau of Statistics survey which included only the five income classes appearing in column 1.
- (3) The average of column 2 and column 3 weighted according to the relative amounts of revenues obtained from the property tax and the power utility projected for each of the three years.

TABLE 2

## FISCAL EQUITY EFFECTS OF LOSS OF RIGHTS OF EDMONTON

## POWER TO SUPPLY POWER TO ENTIRE

## EDMONTON METROPOLITAN AREA, 1971, 1976, 1981

YEAR	INCOME CLASS	INDEX OF INCIDENCE, IN OUTER AREA			INDEX OF INCIDENCE, CITY BOUNDARIES		
		PROPERTY TAX <sup>(1)</sup>	POWER <sup>(2)</sup> REVENUES	WEIGHTED TOTAL <sup>(3)</sup>	PROPERTY TAX <sup>(1)</sup>	POWER REVENUES	WEIGHTED TOTAL <sup>(3)</sup>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1971	\$3,000 - 3,999	102.5	63.0	101.2	102.5	100.0	102.2
	4,000 - 4,999	84.5	59.0	83.7	84.5	90.8	85.2
	5,000 - 5,999	75.1	56.4	74.5	75.1	86.2	76.4
	6,000 - 6,999	71.1	59.4	70.7	71.1	88.1	73.1
	7,000 - 7,999	66.4	51.2	65.9	66.4	76.8	67.6
1976	\$3,000 - 3,999	103.4	63.0	101.7	103.4	100.0	103.0
	4,000 - 4,999	85.2	58.0	84.1	85.2	90.8	85.8
	5,000 - 5,999	75.8	56.4	75.0	75.8	86.2	76.9
	6,000 - 6,999	71.8	59.4	71.3	71.8	88.1	73.5
	7,000 - 7,999	67.0	51.2	66.3	67.0	76.8	68.0
1981	\$3,000 - 3,999	103.4	63.0	101.6	103.4	100.0	103.0
	4,000 - 4,999	85.2	59.0	84.0	85.2	90.8	85.8
	5,000 - 5,999	75.8	56.4	74.9	75.8	86.2	76.9
	6,000 - 6,999	71.8	59.4	71.2	71.8	88.1	73.5
	7,000 - 7,999	67.0	51.2	66.3	67.0	76.8	68.0

(1) Column 3 and 6 are equal to column 2 of Table 1 increased by the relative amount of additional property tax needed to replace the revenues lost by Edmonton Power not supplying power in the outer area.

(2) Column 4 equals the burden of the non-residential portion of power utility revenues shifted to residents of the outer area based on the distribution of their consumer expenditures by income class. The non-residential portion of power utility revenues is projected to equal 63 per cent of total power utility revenues for the years 1971, 1976 and 1981.

(3) Weighted according to the relative total burden of property tax and power utility revenues allocated to each area.

TABLE 3

CONVERSION OF COLUMNS 5 AND 8 OF TABLE 2 INTO  
 INDICES USING THE \$3,000-3,999 INCOME CLASS AS  
 THE BASE EQUAL TO 100.0

INCOME CLASS	(OUTER AREA) INDEX OF COLUMN 5 OF TABLE 2, \$3,000-3,999 INCOME CLASS EQUALS 100.0			(CITY BOUNDARIES) INDEX OF COLUMN 8 OF TABLE 2, \$3,000 - 3,999 INCOME CLASS EQUALS 100.0		
	1971 (2)	1976 (3)	1981 (4)	1971 (5)	1976 (6)	1981 (7)
\$3,000-3,999	100.0	100.0	100.0	100.0	100.0	100.0
4,000-4,999	82.7	82.7	82.7	83.4	83.3	83.3
5,000-5,999	73.6	73.7	73.7	74.8	74.7	74.7
6,000-6,999	69.9	70.1	70.1	71.5	71.4	71.4
7,000-7,999	65.1	65.2	65.2	66.1	66.0	66.0







*SUBMISSION BY KIDDER, PEABODY & CO. INCORPORATED*



SUBMISSION TO  
SPECIAL ADVISORY COMMITTEE  
ON THE  
POWER COMMISSION ACT

KIDDER, PEABODY & CO.  
NEW YORK, N. Y.





Kidder, Peabody & Co.  
Incorporated  
New York, N. Y.

August 16, 1968

His Worship Vincent M. Dantzer  
Mayor of the City of Edmonton  
City Hall  
Edmonton, Alberta, Canada

Dear Mayor Dantzer:

We have studied the proposed Power Commission Act and must advise you that, if enacted, there is a substantial chance of an adverse reaction both from United States institutional investors who purchased the recent \$12,000,000 issue of Twenty-Five Year 6 $\frac{3}{4}$ % Sinking Fund Debentures due January 15, 1993 which Nesbitt, Thomson and Company Limited and ourselves placed privately in the United States, and from United States holders of your other outstanding issues.

It is our fear that this legislation may be viewed as radical and lead both investors and our rating agencies to fear other possible legislation of this type in related areas.

The likely application of "designated service areas" in the proposed act to municipally owned utilities would, in our opinion, do violence to the accepted principle of territorial integrity for municipalities where service boundaries are expected to be at least coincident with corporate boundaries. Present provisions whereby a provincial body regulates and controls construction and extensions of municipally owned power utilities would seem to investors to be the appropriate deterrent to uncontrolled expansion. This is the kind of limitation which is acceptable to the investment community. We believe that the bondholders would have a definite unfavorable reaction to any step which might forever foreclose any expansion of the municipal power system to include its corporate boundaries.

His Worship Vicent M. Dantzer

August 16, 1968

The fundamental strength of a debt security offered to investors by any municipality in Canada, or elsewhere, is the credit standing and financial integrity inherent in the municipal government. Therefore, as long as a municipality has bonds outstanding, the government body of the municipality has an obligation to maintain the integrity of the securities it has sold, not only by paying the interest and principal of the bonds, but by sustaining or improving the level of risk assumed by the investor at the time of purchase. This obligation includes making every effort to satisfy the minimum expectations for growth in earnings of the municipal utilities.

A fundamental step in facilitating the placement of Edmonton's Sinking Fund Debenture issue of last January upon favorable terms was the strength and flexibility of Edmonton's utilities and the consequent effect on the mill rate for general property taxes. We were able to persuade both Moody's Investors Service, Inc. and Fitch Investors Service, Inc. to upgrade the City's rating from "Baa" to "A", but only after an intensive presentation which stressed the present and potential contribution which the City's utilities can make to the General Fund of the City, without compromising reasonable rates and good service. The significance of the power utility to the credit of Edmonton may be readily appreciated from the table set out in Exhibit A attached hereto.

If the proposed legislation is enacted by the Province, we believe that there is an important risk that Edmonton will not retain its "A" rating. If Edmonton were to slip from its present ranking with cities such as Montreal and Metro Toronto, the credit standing of every municipality in Alberta could be effected adversely. A drop from a Moody's rating of "A" to a "Baa" would mean an increase in borrowing costs of between  $\frac{1}{4}\%$  and  $\frac{1}{2}\%$ . Even with higher rates of interest, it would become more difficult to interest the investment community in purchasing the City's obligations. Many pension funds and other institutional investors in the United States are limited to purchasing debt with two "A" ratings or better, and these purchasers are a significant source of investment funds.

At the time of the January Debenture issue, some investors expressed serious concern that the Local Authorities Board Act contains clauses which empower the Board to adjust the terms and conditions of debt repayment of municipalities under certain conditions without consent of all bondholders. Concern over such an entirely academic legal provision illustrates what might be expected from legislation of this type with immediate relevance to the City's credit. Edmonton and other municipalities of Alberta, have a substantial amount of debt outstanding which was sold, in part, with the lack of any expectancy that the Province of Alberta would regulate or restrict municipally owned utilities to the extent contemplated in the proposed act.

If the proposed Power Commission Act is passed, it is likely to penalize the City of Edmonton both in the effect which it may have on its power utility and in the effect which it may have upon its credit. If investor confidence is shaken, the ramifications are likely to extend beyond the credit of the City of Edmonton.

Nicholas J. Coolidge  
Vice President

## EXHIBIT A

	1967	1966
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## POWER PLANT

Total revenues	\$8,687,552	\$8,170,520
Taxes paid to City	669,328	600,322
Net income:		
paid to City	2,043,602	2,384,954
reinvested	267,499	290,108
total	\$2,311,101	\$2,675,062

## DISTRIBUTION SYSTEM

Total revenues	\$16,428,810	\$15,545,467
Taxes paid to City	1,214,003	1,114,381
Net income:		
paid to City	3,108,400	2,288,754
reinvested	----	620,394
Total	\$3,108,400	\$2,909,148

Total payments to the general funds of the City made by the power plant and distribution system amounted to 9.3% of general revenues in 1967 and 9.4% of general revenues in 1966.

	1967	1966
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## TOTAL PAYMENTS TO GENERAL FUNDS OF CITY

## POWER PLANT

Real estate tax	\$ 234,950	\$ 191,796
5% revenue tax	434,378	408,526
Total tax payments	669,328	600,322
Net income paid to City	2,043,602	2,384,954
Total Payments to City	\$2,712,930	\$2,985,276

## DISTRIBUTION SYSTEM

Real estate tax	392,563	337,108
5% revenue tax	821,440	777,273
Total Tax payments	1,214,003	1,114,381
Net income paid to City	3,108,400	2,288,754
Total payments to City	\$4,322,403	\$3,403,135
Grand Total payments to City	\$7,035,333	\$6,388,411



**L**

*SUBMISSION BY VAN SCOYOC & WISKUP, INC.*



SUBMISSION TO  
THE SPECIAL ADVISORY COMMITTEE  
ON THE  
PROPOSED POWER COMMISSION ACT  
BY VAN SCOYOC & WISKUP, INC.





VAN SCOYOC & WISKUP, INC.  
Public Utility Consultants  
1735 K Street, Northwest  
Washington, D. C. 20006

August 15, 1968

The City Commissioners  
The City of Edmonton  
City Hall  
Edmonton, Alberta, Canada

Gentlemen:

In accordance with your request we submit our comments and opinions concerning the rights and prerogatives of municipalities in relation to the generation and distribution of electric power.

While we have general knowledge of the Canadian electric power industry, necessarily our comments and opinions on this subject matter reflect, in large measure, our long experience with various aspects of the electric power industry in the United States, including its organization and structure, governmental policies and regulation.

Since information concerning public power systems and their regulation in the United States may be of particular interest, we have attached two Appendices to our report. Appendix No. 1 consists of information concerning "Publicly Owned Power Systems in the United States," and related matters. It briefly summarizes national electric power policies generally and describes the various segments of the public power industry.

Appendix No. 2, entitled "State Regulation and Control of Municipal Electric Utilities," reviews in general the extent, form and kinds of regulation imposed on municipal utilities by state agencies.

## **PUBLIC POLICY IN REGARD TO ELECTRIC POWER**

At the outset it should be noted that the generation and distribution of electric power to the public is a public business, whether the performance of such activity is entrusted by the Government to private interests or to public bodies. The public policy of the Government in this regard is paramount. The most important consideration in carrying out such public policy is a furthering of the interests of the public through making possible the availability of power to the citizenry at the lowest rates consistent with a sound financial policy and achievement of the social objectives made possible by low cost power.

The particular form that the ownership and control of the power generation and distribution business should take in order to achieve the greatest good for the greatest number of people, is necessarily a decision to be made by the Government. These forms are varied both in Canada and the United States.

## **BASIS FOR MUNICIPAL ELECTRIC SYSTEMS**

The development of municipally owned electric power systems has generally taken place in response to four factors.

- (1) Failure of private ownership to meet demands in unserved areas.
- (2) Dissatisfaction with high rates and/or poor service of privately owned systems.
- (3) Desire for public ownership and control of utility services in the community.
- (4) Desire for source of additional municipal income.

These factors have been enhanced in the United States by the availability of low cost power from government projects on a preferential basis in certain areas and availability of low cost money from government and private sources. To some extent the creation of municipal systems has been influenced by the desire of privately owned utilities to get out at a favorable price.

Since municipalities have been created for the purpose of fulfilling the inherent right of the inhabitants of a particular area to self-government with certain powers, privileges and

obligations, the right of a community to own and operate its own electric system is undeniable. Nevertheless, it must be recognized that such right is not beyond the control of the legislature, and properly so. The degree of legislative control in this area should be directed at securing harmony with the overall policies enunciated by the legislature, but should not intrude upon subject matters appropriate to the orderly conduct by a municipality of its power generation and distribution activity.

#### **CONTROL OVER MUNICIPAL SYSTEMS**

The need for control over municipal electric systems by state agencies has manifested itself only to a minor degree in the United States. Control or regulation, as it is commonly termed, is exercised in only ten of the fifty states in significant degree. Regulation in five other states is applicable to municipal system operations that are outside of the corporate boundaries. Regulation of municipal utilities is generally confined to such areas as the following:

- (1) Reasonableness of rates charged for service.
- (2) Issuance of securities.
- (3) Prescription of uniform accounting standards and reporting requirements.
- (4) Safety and adequate service regulation.
- (5) Certificates of convenience and necessity.

It cannot be said with any degree of certainty that regulation of municipal electric systems by a State regulatory commission in the above areas has resulted in a superior type of municipal utility operation in those particular States. Undoubtedly certain managerial incompetencies, errors and abuses have been uncovered and corrected, particularly in regard to the small systems which cannot afford top-rate managerial talent. Likewise, State regulation has undoubtedly stifled some political machinations which would otherwise have resulted in discriminatory rates, improper diversion of funds and overstaffing. Moreover, there is evidence that regulation has resulted in some reductions in consumer rates, which otherwise might not have been made. These problems which confront the smaller electric systems rarely occur in the larger municipal systems

that can afford quality management, good accounting systems, competent engineering and planning departments, as well as a technically competent and experienced operating staff.

Whether or not regulation should be imposed upon existing municipal electric systems would, in our opinion, require consideration in the following matters:

- (1) Is the public receiving unsafe, inadequate and unreliable service from the municipal systems?
- (2) Are the rates of the municipal systems unreasonably high or discriminatory?
- (3) Are the municipal systems being wastefully and inefficiently managed?
- (4) Is the financial condition of the municipal systems so poor that they cannot secure, at a reasonable cost, the funds required for expansion of system plant?
- (5) Are the accounts and records of the municipal electric systems being improperly maintained?
- (6) Are the funds of the municipal electric systems comingled with those of city departments and used for non-utility purposes without proper recognition and transfer as taxes or tax equivalents to the city's general fund?
- (7) Are the municipal electric systems failing to properly develop the power resources that are available to them, or to take advantage of opportunities for coordination and integration with other utility systems so as to secure available economies and enhance the reliability of their service?

Unless one or more of the foregoing questions are answered in the affirmative and factually supported, the need for regulation of municipal electric utilities is not apparent.

Because the inhabitants of a municipality have the right, through the elective process, to select the public officers who are responsible for the conduct of the affairs of the municipal utility system, most inadequacies, abuses and evils mentioned above are subject to correction over time through the democratic political process. This requires substantial knowledge of the municipal system operations and a keen interest therein on the part of the electorate. Likewise, without the



generation of sufficient public sentiment, these corrections are difficult to accomplish. On the other hand, experience has shown that dedication, pride of workmanship and the desire to surpass on the part of municipal system managements, as well as competitive rate situations, have served to place the efficiency and successful operation of the larger municipal systems on a par with privately owned utilities which have the profit motive as their incentive.

#### **APPROPRIATE REGULATORY AREAS**

Nevertheless, even in the case of large municipal systems most of the authorities that have studied municipal ownership of electric systems have reached the conclusion that some degree of regulation should be imposed on municipal electric utilities. We share that belief. In our opinion there are two areas where such regulation is appropriate and necessary. The first is that municipal utilities should conform to substantially the same uniform accounting standards that are required of privately owned utilities and should also be required to publish comprehensive financial and operating reports. Second, the activities of municipalities outside of the corporate boundaries should be subject to control as to the rates charged, territory to be served and the service obligations within such territory.

The reasons for uniform accounting and reporting arise from the necessity of providing the appropriate government officials and the electorate with information that can be used to (1) judge the stewardship of the municipal utility officials, (2) to guard against financial mismanagement and (3) to provide a means of comparing the results of the operations of one utility system with another. The need for uniform accounting standards and reporting is undeniable and enjoys virtually universal support.

The reason for the control of municipal utility extra-territorial activities stems from the lack of power on the part of the inhabitants of the area served outside the corporate boundaries to influence the conduct of the municipal systems and thus protect themselves against exorbitant and discriminatory rates and poor service. Moreover, the municipal utility that is willing to serve

its neighboring areas and communities should have protection against competition from other suppliers that desire to serve such territory. On the other hand, municipal utility systems should not be permitted to invade territory outside the municipal boundaries which is being adequately served by another utility. Duplication of facilities should be avoided. If the inhabitants of such territory prefer to be served by the municipality they should have the opportunity of presenting their position to a Board or Commission which would have the authority to allot territory outside the corporate boundaries of municipalities to whatever supplier (private utility or rural power district) it believes will best serve the interests of the inhabitants.

When a municipality serves territory outside of its corporate boundaries, it is engaging in a basically commercial enterprise. It is not performing a true governmental function as such, nor is it exercising such municipal corporate duties as are imposed by law. In such circumstances the municipality should be bound by the rules and procedures applicable to a person engaged in a like enterprise.

Beyond these areas of (1) uniform accounting and reporting, and (2) activities outside the corporate boundaries, it is our considered opinion that a municipal electric system should be free to exercise such rights and powers as have been delegated to it by the City Council or other local public authority. These would include full control over the following aspects of the municipal electric system operations, in accordance with the established policy of the municipal administration.

- (1) Organization and structure of operating entity.
- (2) Service obligations.
- (3) Rates to be charged for sale of power.
- (4) Service rules and regulations.
- (5) Financing of system.
- (6) Planning and making of system additions, improvements and extensions.
- (7) Contracting with other entities for the sale, purchase and exchange of power.
- (8) Acquisitions of privately owned systems operating within municipal boundaries, including annexed areas.

- (9) Taxes and tax equivalents payable to municipal general fund.
- (10) Payments to electric system for street lighting and other municipal power uses.

The municipal electric system should have the right to own generating stations and transmission lines outside of the corporate boundaries for the purpose of serving its inhabitants and the inhabitants of such areas outside the corporate boundaries that it may be authorized to serve, subject to such control and regulation as is usually imposed in regard to any proposed use of streams, lakes, etc., crossing of water courses and highways by transmission lines, air and water pollution, zoning, etc.

In the event a government power system is established and power is offered for sale to municipal electric systems for the purpose of making available low cost power as a means of stimulating and improving the economic development of the area and the living standards of the citizens, it would be appropriate, in our judgment, to impose upon any electric system which buys such power the obligation to resell it to ultimate consumers at the lowest reasonable non-discriminatory rates so as to encourage the widest possible use of electric energy.

Where economies can be secured, through pooling arrangements with other power systems the municipality should be afforded the opportunity to participate in such activities on a voluntary basis such as is the case in the Pacific Northwest where the municipal utilities have joined with the investor-owned utilities and the Bonneville Power Administration in what is known as the Pacific Northwest Coordination Agreement.

Respectfully submitted,

VAN SCOYOC & WISKUP, INC.

S/S *Melwood W. Van Scoyoc*  
*Melwood W. Van Scoyoc*  
*President*





## **PUBLICLY OWNED POWER SYSTEMS IN THE UNITED STATES**

### **NATIONAL ELECTRIC POWER POLICIES**

In reviewing the status and character of municipal electric utility operations in the United States, it is necessary to consider the guidelines of the apparent national power policies.

Electric power policies of the Federal and State governments center in the belief that availability of electricity in abundance at low rates is a major means of stimulating economic development and improving the living standards of the country's citizens and in serving the interests of national defense.

Implementation of this policy by the Federal government received its strongest impetus during the mid 1930's through the government's initiation and financing of public power projects to bring low cost electricity to certain underdeveloped areas of the country. Chiefly these were hydroelectric projects the development of which included other benefits from flood control, irrigation and improvement of navigation. The projects developed, moreover, were generally of such scope and cost that power benefits could be derived only jointly with the other benefits and hence were beyond the practicability of private development solely for power.

The overall format of this implementation of the national power policy also included Federal monetary grants and long-term loans at low interest rates to state agencies to develop hydroelectric power and build transmission lines. These developments were vested in public power systems or authorities created by special legislation of the states. Such legislation in many cases also brought about public power districts to distribute the low cost power available from the central systems. These were financed to a major extent with non-Federal funds aided by the tax exempt status of the districts.

Another important development was enactment of the Rural Electrification Act designed to bring modern conveniences and comforts to rural areas to which investor owned utilities

had been reluctant to extend their electric lines. This legislation created the Rural Electrification Administration, essentially a lending agency, which provides low-cost money to cooperative organizations formed to build rural power lines and distribution systems. Through its basic position as a lender the Administration exercises control over the cooperatives by setting standards of construction, and operating, financial and accounting procedures.

The more widespread availability of low-cost power was a major factor in stabilizing and increasing the number of municipal and other local systems in the country such as the public power districts in the State of Washington. Previously there had been a strong trend for the municipal systems to be absorbed by the integrated investor-owned systems. Through access to low-cost power the municipalities were enabled to sustain their rights of self-determination. Thereby, also, the municipal systems became more generally recognized as an important segment of the electric power industry. With that stature the financial affairs and operations of municipal systems were subjected to greater requirements of public disclosure and analysis according to uniform accounting methods and financial practices applicable to all segments of the industry.

#### **ELECTRIC POWER SYSTEMS – GENERAL**

Electric power systems in the United States are embraced in the main, within three ownership segments.

1. Privately owned or investor owned utilities,
2. Publicly owned utilities, and
3. Cooperatives.

Privately owned utilities serve about 79% of the retail customers in the nation, publicly owned utilities about 13½%, and cooperatives 7½%. In numbers, the publicly owned systems predominate with 60% of the total number of systems but the average size of such systems is small. Municipal systems vastly outnumber the other publicly owned systems which are operated by the Federal Government, State Governments, Counties, Public Utility Districts and Irrigation Districts.

## **FEDERAL POWER SYSTEMS**

The Federal Government produces electric power at approximately 125 hydroelectric projects which are part of the Federal multi-purpose water resource developments. Except for the Tennessee Valley Authority (TVA) which is a completely independent agency, the agencies which market public power are not always the agencies responsible for construction and operation of the generating facilities. Bonneville Power Administration, for example, has an extensive network of transmission facilities in the Pacific Northwest over which it markets power from projects constructed and operated by the Corps of Engineers and Bureau of Reclamation. The Bureau of Reclamation also is a marketing agency for power produced at certain Corps of Engineer plants. Additional marketing agencies are the Southwestern Power Administration and Southeastern Power Administration. With exception of TVA, the Federal power marketing agencies are subject to the administration of the Department of Interior.

Except for TVA and a few special projects of the Bureau of Reclamation, power rates established by the several marketing agencies are subject to confirmation and approval by the Federal Power Commission. All of the agencies operate on a cost to serve basis. There is not a complete uniformity of standards in such service costs, however, due to several factors. The Federal systems are not subject to Federal and State income taxes or to local property taxes. The TVA, however, makes substantial payments in lieu of taxes to State and County governmental units. All of the projects are required to repay the U. S. Government for funds advanced for construction on a foreshortened period, such as 40 or 50 years with interest at average government rates, but the repayment requirements are not uniform. Service costs for rates, in general, include the project repayment requirements rather than normal depreciation reflecting longer service lives of the property.

The Federal power systems do not sell the power at retail to any significant extent except for large industrial use which includes government owned industries such as the Atomic Energy Commission. Primary customers of the Federal power systems are municipal systems,



cooperatives, power districts and privately owned utilities who buy power at wholesale. Statutory preferences for the purchase of power generated by the Federal power systems is given to municipalities, public utility districts, other public agencies and rural electric cooperatives. This factor has been an added stimulant for municipalities in certain sections of the country to acquire or construct their own electric distribution systems.

In the year 1966 all Federal power systems sold 145,926 million kilowatt hours for \$576,824,000. The Federal power systems are interconnected with privately owned systems and with municipally owned and cooperative generating systems under various types of pooling arrangements which include emergency assistance and economy interchange.

#### **TENNESSEE VALLEY AUTHORITY**

TVA serves 80,000 square miles in the Tennessee River Basin area. It is the only Federal power system with full responsibility for meeting all power supply requirements in any sizeable area of operation. The system has 18,112 megawatts of generating capacity, 13,928 of which is in steam plants. The system is the largest in the country with approximately twice the capacity of the next largest. Unlike the other Federal systems which must obtain their capital funds by Congressional appropriations, TVA may obtain funds in the private capital markets by the issuance of revenue bonds.

The power output of TVA, according to the Agency's 1967 report, is distributed 50% to municipalities and cooperatives, 25% to Federal agencies, 23% directly to industries, and 2% to other systems. TVA's non-power activities include operation of navigation facilities, flood control and cooperative valley development.

An extensive power supply business is done by TVA through direct sales to industries of which a major portion are those attracted to the TVA area by low power rates. Additional sales are made to several connecting private utility systems. These are made under a variety of contracts with fourteen private utilities and one generation and transmission cooperative. Such contracts



provide for interconnection of facilities or interchange, sale and purchase of power, for emergency standby services, or various combination of these.

TVA served 158 distributors during 1967. Of these, 50 were cooperatives and 108 municipal and county distribution systems. The four largest municipal systems<sup>(1)</sup> sold 6,206 million kilowatt hours to 495,993 residential customers at an average rate of .90 cents per Kwh. Power service and lighting sales amounted to 8,723 million kilowatt hours for which the average rate received was .74 cents per Kwh. Average annual residential usage of electricity was 12,672 kilowatt hours for the four largest municipalities and 12,180 kilowatt hours for the other municipalities. This compares with the national average of 4,950 kilowatt hours for the nation's privately owned utilities.

Average power cost to the four large municipalities was .404 cents per kilowatt hour and for the smaller municipalities .423 cents per kilowatt hour.

The privately owned distribution systems are served by TVA at TVA's standard wholesale rates and resold at TVA standard retail rates.

The local distribution systems are regarded as partners of TVA in the effort to make low-cost electricity a tool in the region's development. Wholesale service to the distributors is provided by standard contracts which subject the municipal utilities to a high degree of control and supervision by TVA. A particularly interesting contract provision is the following:

“1. Financial and accounting policy - Municipality agrees to be bound by the following statement of financial and accounting policy.

(a) Except as hereinafter provided, Municipality shall administer, operate, and maintain the electric system as a separate department in all respects, shall establish and maintain a separate fund for the revenues from electric operations, and shall not directly or indirectly mingle electric system funds or accounts, or otherwise consolidate or combine the financing of the electric system, with those of any other of its operations.

*(1) Chattanooga, Knoxville, Memphis and Nashville, all in Tennessee*

The restrictions of this subsection include, but are not limited to, prohibitions against furnishing, advancing, lending, pledging, or otherwise diverting electric system funds, revenues, credit or property to other operations of Municipality, the purchase or payment of, or providing security for, indebtedness, or other obligations applicable to such other operations, and payment of greater than standardized or market prices for property or services from other departments of Municipality. In the interest of efficiency and economy, Municipality may use property and personnel jointly for the electric system and other operations, subject to agreement between Municipality and TVA as to appropriate allocations, based on direction of effort, relative use, or similar standards, of any and all joint investments, salaries, and other expenses, funds, or use of property or facilities.

(b) Municipality shall keep the general books of accounts of the electric system according to the Federal Power Commission Uniform System of Accounts. Municipality shall allow the duly authorized agents of TVA to have free access at all reasonable times to all books and records relating to electric system operations. TVA will provide advisory accounting service, in reasonable amount, to help assure the proper setting up and administering of such accounts.

(c) Municipality shall supply TVA not later than August 15 of each year with an annual financial report, in such form as may be requested of electric system transactions for the preceding year ending June 30 and of electric system assets and liabilities as of June 30. Municipality shall furnish promptly to TVA such monthly operating, statistical, and financial statements relating to electric system operations as may reasonably be requested by TVA. In the event of failure to furnish promptly such statements TVA, following written notification to Municipality of intention so to do, may with its own staff perform at Municipality's expense all work necessary to collect such data.

(d) Municipality shall have the electric system financial statements examined annually by independent certified public accountants in accordance with generally accepted auditing standards and shall publish the financial statements along with the auditor's

certificate in a newspaper of general circulation in the area.”

The wholesale service contracts also contain provisions concerning payments of or in lieu of taxes which provide that the municipality may take each year from the electric system amounts representing the fair share of cost of government properly to be borne by its electric distribution system.

Distribution service rates are furnished to the municipalities and other distributors by TVA in the form of standard rate schedules. Nine series of retail rates are available each including schedules for residential service, general power service, and outdoor lighting service. The rate series are in a graduated standard format. This permits a distributor to adopt that series best suited for his financial requirements and to effect rate increases or decreases when required by selecting and obtaining TVA approval to using the appropriate other series of schedules.

#### **BONNEVILLE POWER ADMINISTRATION**

Unlike TVA, the Bonneville Power Administration (BPA) was not created in the form of an independent corporation with broad autonomous powers, nor vested with powers to provide financial assistance to States, Counties, municipalities, and non-profit organizations in acquiring, improving, and operating existing distribution facilities and incidental works including generating plants.

BPA is the marketing agency for Federal generating projects and joint purpose facilities in the Columbia Basin area of the Pacific Northwest, and is authorized to construct, operate and maintain transmission lines and other appurtenant facilities as necessary for stated objectives; as follows:

“In order to encourage the widest possible use of all electric energy that can be generated and marketed and to provide reasonable outlets therefor, and prevent the monopolization thereof by limited groups, the administrator is authorized and directed to \*\*\* (provide transmission facilities), and, for the purpose of interchange of electric energy, to interconnect



the Bonneville project with other Federal projects and publicly owned power systems now or hereafter constructed.”

(Parenthesis added)

The Administrator is subject to a strong directive under the Bonneville Act that “\*\*\*the facilities for the generation of electric energy at the Bonneville project shall be operated for the benefit of the general public, and particularly of domestic and rural consumers. The Administrator shall at all times, in disposing of electric energy generated at said project, give preference and priority to public bodies and cooperatives.” These preference requirements of public bodies are further amplified and emphasized in the Bonneville Act and constitute its most outstanding feature. The feature has a timing provision, moreover, to permit public bodies an opportunity to hold elections, arrange financing necessary to acquire or construct distribution facilities and in all other respects become legally qualified purchasers and distributors of Bonneville power.

The Act provides that contracts entered into with any utility engaged in the sale of power to the general public “shall contain such terms and conditions \*\*\* concerning resale rates, \*\*\*, as the Administrator may deem necessary, desirable or appropriate \*\*\* to effectuate the purposes of this Act and to insure that resale by such utility to the ultimate consumers shall be at rates which are reasonable and non-discriminatory.

The Administrator is directed to “negotiate and enter into contracts for the sale at wholesale of electric energy, either for resale or direct consumption, to public bodies and cooperatives and to private agencies and persons and for the disposition of electric energy to Federal agencies.” The contracting powers also extend to mutual exchange of unused excess power with public or private power systems upon suitable exchange terms for economical operation, emergency service, or breakdown relief.

The rates and charges for Bonneville power are specified to be prepared by the Administrator and to become effective upon confirmation and approval of the Federal Power Commission. Such rates are required to meet a statutory objective of being established with a view to encouraging



the widest possible diversified use of electric energy.

Operationally the Bonneville Power Administration, through the U. S. Department of Interior, is under close surveillance of the Congress of the U. S. For example, revenues collected by the Administration are required to be covered into the Treasury of the United States and expenditure budgets require authorization of the Congress.

BPA markets power from a large number of hydroelectric generating stations, mostly located at multi-purpose dams in the Pacific Northwest. Its operations are extensive. In addition to supplying power to a great number of public bodies and municipalities, it sells power to many heavy industrial users of electricity, and serves as a dominant partner in the Northwest Power Pool to promote the most economical use of generating and transmission facilities in the Pacific Northwest. During its fiscal year ended June 30, 1966, the Administration received \$100,461,004 in revenues from the sale of 39,713 million kilowatt hours. Sales to large industrial consumers accounted for \$37,233,592 of the revenues and 18,063 million kilowatt hours. Sales for resale amounted to \$57,777,939 for 21,650 kilowatt hours. There was an outward delivery of 4,982 million kilowatt hours for exchange against 4,650 million kilowatt hours received. Transmission for or by others (wheeling) amounted to approximately 12,500 million kilowatt hours.

Seattle and Tacoma, Washington, two of the country's largest municipal electric utilities, are served by Bonneville Power Administration. Both of these municipalities, however, have hydroelectric generating facilities and a relatively small amount of steam power generation.

## STATE OWNED POWER SYSTEMS

Nebraska is the only State completely served by publicly owned power systems. The principal unit of the basic system is *Nebraska Public Power System*. (NPPS). Origin of that unit is explained as having evolved from an Enabling Act of the state legislature, to wit:

“In the late 1930's the Nebraska Legislature passed legislation in the form of an ‘Enabling Act’ which permitted formation of public power districts (both wholesale

and retail), with original construction funds being provided by Federally supported 'Loans and Grants' for the major wholesale power and irrigation districts, and, under Rural Electrification Administration, loans for the retail distribution districts. Since formation, the additional funds have been provided by a combination of REA and public borrowing."

"The wholesale power districts (either by operating agreement or by power sales contract) operate an integrated system under the name of Nebraska Public Power System \*\*\*\*"

Implementation of the Enabling Act resulted in acquisition of all privately owned power supply and distribution systems. This was fully consummated in 1946. Financing of these acquisitions apparently was mainly by revenue bonds substantially held by the U. S. Government. Federal grants apparently were mainly used for hydroelectric plant construction and related transmission facilities. Nebraska, thereby became completely served by publicly owned power systems. A number of municipal plants, however, joined in creation of local public power districts, although others continued their existence nominally independent of the public power system.

Nebraska Public Power System, the principal power supply organization, is an apparent partnership embracing two power supply districts and what is identified as steam generating division of NPPS. Reports to the Federal Power Commission show that no revenues or operating expenses are attributed to Nebraska Public Power System, although the System balance sheet is presented showing a substantial plant investment. Statistical data for NPPS is also reported. The System's revenues and expenses are all shown as prorated to the two public power district partners of NPPS.

Nebraska Public Power System functions as a central agency with a number of coordinating functions:

- (a) Power supply from outside the overall system as well as that available from the two power-district partners, others satellite power districts, and municipal systems,

- (b) Power requirements of the System's satellite power districts and other wholesale customers,
- (c) Ratemaking and power system design functions,
- (d) Financial requirements of the partner power districts, and satellite districts particularly as to the relation of rate policies to debt service needs.

The Nebraska Public Power System reported 1966 power sales of 2,628 million kilowatt hours for which the revenues were \$23,031,649. This, however, does not represent total input to the distribution systems of the integrated public power system and to industrial customers since some units and customers also generate power which is not accounted for through the Nebraska Public Power System. Sources of the power marketed under auspices of Nebraska Public Power System are reported as 17% from hydroelectric facilities in Nebraska, 35% from steam generating facilities in Nebraska, and 45% from U. S. Bureau of Reclamation power available at Nebraska state line connections. Source of the remaining 3% is not indicated.

For the entire State the installed generating capacity of power districts and municipalities included in FPC statistics is steam generating plants, 1,307,450 kilowatts, hydroelectric generating plants, 135,500 kilowatts, and internal combustion engine generating plants, 28,115 kilowatts. The largest installation is that of Omaha Public Power District which reports installed steam generating capacity of 626,100 kilowatts. Seven municipalities, which may be "independent" of the public power system, account for total installed capacity in the state to the extent of 173,150 kilowatts of steam generating capacity and 16,193 kilowatts of internal combustion engine generating capacity.

The NPPS transmission grid, primarily at 115,000 volts, is reported to provide power and energy to 76 of the State's 93 counties. Such grid provides the means of supplying practically all of the power requirements of the eastern two-thirds of the State, exclusive of the Omaha District.

In addition to Nebraska, the States of New York, Oklahoma, South Carolina and Texas have initiated power systems all involving river control projects, the New York Power Authority being



the most recently organized system. The state of Arizona has a Power Authority, however, its operations are confined to the sale of power at resale which is purchased from the Bureau of Reclamation and transmitted over their lines. These river Authorities, with one exception, namely, the Lower Colorado River Authority in Texas, have not developed significantly beyond the initial hydroelectric projects for which the Authorities are the operating agents. With the exception of New York these systems furnish only a comparatively minor part of the electric energy generated within their respective states.

The *Power Authority of the State of New York* in conjunction with the Hydroelectric Power Commission of Ontario has undertaken coordinated development of power on the St. Lawrence River. This has been done together with coordinated development by Canada and the United States of the St. Lawrence Seaway project. The power potential of the St. Lawrence is shared by the two countries.

The Power Authority of the State of New York is the agency which developed the U. S. power facilities at Niagara Falls and the U. S. portion of the international power development at Massena, New York and Cornwall, Ontario. The development at Niagara Falls consists of conventional hydroelectric generating plant with 1,954,000 kilowatts of installed capacity and 240,000 kilowatts of installed capacity in a pumped storage project. The U. S. portion of the Massena-Cornwall development consists of sixteen generating units with total installed capacity of 912,000 kilowatts. Total output of these developments for 1966 was 18,280 million kilowatt hours. Additional power from purchases and interchange amounted to 578 million kilowatt hours.

Total plant investment of the Power Authority of New York as of December 31, 1966, undepreciated, was \$1,087 million for generating, transmission and general facilities. Power investment of the Authority was financed by revenue bonds sold to private investors without any governmental or tax support. Hence, the projects are operated and bonds retired solely from revenue derived from the sale of power.



The Authority sells its power in wholesale amounts to three power companies; to 39 municipal and cooperatively owned electric systems in New York; to three industrial plants at Massena; to the State of Vermont and to an association of rural cooperatives in the State of Pennsylvania — a total of 48 wholesale customers. Municipal and rural cooperatives are reported to have realized large savings by contracting for the Authority's low cost power. Private utilities, as required by contract, are reported also to have received and passed on to their consumers the savings resulting from purchases of Authority power.

The Authority had sales in 1966 of 18,600 million kilowatt-hours and revenues of \$88,451,000. About 80% of its sales were made for resale to governmental agencies and privately owned utilities, the balance being sold to industrial customers.

Federal law requires the Authority to supply 445,000 kilowatts of low cost power to Niagara Mohawk Power Corporation for resale to industries located in the Niagara Frontier. Such requirement, we understand, is related to the needs of industries in the Niagara Frontier whose access to low cost Niagara power was interrupted by reconstruction and enlargement of the Niagara power facilities following, among other things, loss of the Schoellkopf plant by a landslide. Another type of power, called expansion power, has been allocated 250,000 kilowatts of Niagara firm power for sale to industries located within thirty miles of the Niagara project. Such power is sold to local utility companies for resale to industries which require low cost power to enable them to expand operations, or which may provide an incentive for new industries to locate in the Niagara Frontier. Thus, obvious policies of the Power Authority, in addition to encouraging municipal and other publicly owned utilities is to preserve and expand economic development in an area blessed with an extraordinary supply of firm hydroelectric power.

The financial practices of the Power Authority of the State of New York omit depreciation as a charge in the income statement. Instead, pursuant to bond resolution, income charges are made for retirement of bonds and reservation for working capital. For 1966, these charges amounted to \$42,478,241. This differs, generally, from accounting practices for the comparably large Federal power systems.

The Oklahoma project, known as the *Grand River Dam Authority*, has hydroelectric installed capacity of 194,900 kilowatts and steam generating capacity of 56,250 kilowatts.

The *South Carolina Public Service Authority* has hydroelectric installed capacity of 134,535 kilowatts, steam-electric installed capacity of 100,000 kilowatts, and gas turbine installed capacity of 22,500 kilowatts.

The three Authorities in the State of Texas have hydraulic generating capacity aggregating 240,830 kilowatts and steam generating capacity of 125,000 kilowatts. *The Lower Colorado River Authority* is by far the largest of the three Texas systems. It had sales of 304 million kilowatt hours to ultimate consumers and 1,421 million kilowatt hours for resale. The sales of the other two Authorities were all for resale.

In 1966 the State owned systems of the United States sold 26,833 million kilowatt hours. Revenues were \$152,817,875. The State systems have hydroelectric installed generating capacity of 3,804,503 kilowatts, 512,750 kilowatts of steam generating capacity, and 50,615 kilowatts of gas turbine and combustion engine capacity. County power districts have virtually no generating facilities.

## MUNICIPAL UTILITY SYSTEMS

### (a) STATUS AND GENERAL POWERS

Municipally owned utilities are either authorized by State constitution, legislative enactment or by city charters. Municipalities and other political subdivisions are creatures of the State. As such they are subject to the control of the State legislature, except where constitutional restrictions exist, both Federal and State. State constitutions contain provisions that protect municipalities in a number of areas against State legislative action which may infringe upon local affairs. Subject to these limitations a State legislature may, at its pleasure, contract or expand the corporate boundaries and create or destroy municipal corporations.

In approximately half of the States “Home Rule” provisions are incorporated in State constitutions authorizing self-government by municipalities in various degrees. Municipalities can adopt Home Rule Charters which provide the inhabitants of municipal corporations with all the necessary powers of self-government, free from interference from the State legislature on matters of local concern. However, these Charters are subject to the general rule that the State constitution, public policy or statutes in regard to matters of state-wide concern may not be contravened.

Municipally owned utilities are considered to be public utilities in the same sense as privately owned utilities, i.e., they operate in a proprietary capacity rather than in their governmental capacity. However, there is considerable authoritative support to the viewpoint that the municipal utility acts in a dual capacity, proprietary and governmental, in furnishing utility service to the inhabitants of the municipality. The great bulk of the Municipal systems confine these services to their corporate limits.

In ten of the fifty States, the legislatures have subjected municipal utilities to the jurisdiction of State utility regulatory commissions, generally to the same extent as privately owned utilities.<sup>1</sup> In five States the regulatory commissions have been given jurisdiction only insofar as concerns the operations of municipalities outside their corporate boundaries.<sup>2</sup> In several other States the State commissions have authority to assign territory to public utilities which also affects municipal utilities that serve outside of their corporate boundaries.<sup>3</sup>

In the absence of express State control, the fixing by a municipal utility of the rates which it charges for utility services may not be interfered with unless it is fully shown that they are unjust, unreasonable or clearly discriminatory.

<sup>1</sup> *Indiana, Maine, Maryland, Massachusetts, Montana, New York, Rhode Island, Vermont, West Virginia and Wisconsin.*

<sup>2</sup> *Colorado, New Hampshire, New Jersey, Pennsylvania and Wyoming.*

<sup>3</sup> *Arkansas, Mississippi, Oregon, Delaware, New Mexico, Arizona, Kansas and Kentucky.*



Exemption of municipal utilities' system properties from taxation by the State, constitutionally or by statute is universal. This immunity, however, does not extend to excise and sales taxes based on revenues from the sale of utility services. Municipal systems are exempt from Federal income tax and generally from State income tax.

Although a privately owned utility may be furnishing the inhabitants of a municipality with adequate and satisfactory service at reasonable rates, a municipality has the power in most states to construct and operate a competing publicly owned utility system even though the municipality had previously granted a franchise to the privately owned system. A municipality may exercise its power of Eminent Domain to acquire the property of a privately owned utility system regardless of the fact that the privately owned utility held an exclusive franchise from the municipality. Where municipal utilities have been subjected to State regulatory commission jurisdiction, the authority of the commission may be a prerequisite to such competitive endeavor or the ousting of the privately owned utility from within the municipal boundaries.

Where an area is annexed by a municipality that is served by an existing privately owned utility, or rural cooperative, the right of such utilities to continue such service is generally considered to be terminated. However, the municipality may permit the service to be continued by granting a franchise or simply through sufferance. The municipality may extend its lines into the annexed area, however in certain states it is required to secure a permit or a certificate of public convenience and necessity from the State regulatory commission having jurisdiction. A municipality may also exercise the power of Eminent Domain and acquire the privately owned system in the annexed area.

In most States, municipalities are authorized under their general powers to extend the ownership and operation of municipal utilities systems beyond the corporate boundaries. It is recognized that a municipality cannot be indifferent to the inhabitants in the surrounding rural areas and to their problems, the solution of which is often a matter of common interest to those living within the municipal boundaries. To promote the general welfare of all the citizens in the



area, municipalities are generally given extra-territorial authorities so as to deal with such problems. However, while a municipal utility may maintain a higher level of rates for utility services outside its corporate boundaries, such rate differentials must be soundly based and free from unreasonable discrimination. Municipal utilities are not obligated to extend their facilities outside of their corporate boundaries to particular persons or areas. However, where municipal systems are subject to the jurisdiction of a State regulatory commission they may have the same obligation to provide service within and outside of the corporate boundaries as would be required of a privately owned utility.

Management of a municipal utility system is usually conducted directly by the City or Town Council through a manager or by appointive or elective boards or commissions which exercise various degrees of autonomy from the local city government.

**(b) EXTENT OF MUNICIPAL ELECTRIC SYSTEMS**

The number of municipal electric systems in the United States is in excess of 2,000, however, the great bulk of these systems are of comparatively small size in terms of sales and annual revenue. According to the Federal Power Commission National Power Survey there were 700 public power systems in 1920 and over 3,000 in the early 1930's compared with approximately 2,100 in 1963. The decline has been due primarily to the sale of municipal systems to investor-owned utilities.

The Federal Power Commission publishes comprehensive statistics relating to those municipal systems which submit annual statements to the Commission. Although, as previously noted, there are some 2,000 municipal systems, only 497 submit reports which are required of systems having annual gross revenues in excess of \$250,000. Municipal systems as classified by the Federal Power Commission, include political subdivisions or agencies of States such as counties, power districts, irrigation districts and power authorities. Of the 497 systems classified as municipals, 430 are in fact, municipal electric utilities.

FPC statistics for Municipal Systems, classified as mentioned above, indicate that the 497 systems in 1966 served 6,688,671 customers. Gross revenues amounted to \$1,536,928,000. Kilowatt hour sales were 132,575 million kilowatt hours. The average revenue per kilowatt hour sold in 1966 to ultimate consumers was 1.3¢. Average kilowatt hour sales per customer amounted to 15,936. For the residential classification, the average revenue per kilowatt hour in 1966 amounted to 1.5¢. The average number of kilowatt hours sold per customer was 7,006.

Municipal systems had an investment in utility plant of \$8,023,730,940 as of December 31, 1966. Accumulated provisions for depreciation and amortization amounted to \$1,991,530,691.

The largest power system owned and operated by a municipality is that of the City of Los Angeles. Its revenue from the sale of electricity in 1966 amounted to \$163,689,000. The City serves over 1 million customers in the Los Angeles metropolitan area. The second largest municipal system is the City of Jacksonville, Florida with gross revenue from sales of electricity in 1966 of \$51,483,725. Twelve other municipal systems had gross revenues in 1966 from the sale of electricity in excess of \$10 million. Five of these systems are in the TVA area and purchase all of their power requirements from that Federal Agency. Two systems are in the Pacific Northwest and purchase a portion of their power supply from BPA. One system in California purchases most of its power from the Central Valley System of the Bureau of Reclamation. The remaining systems depend upon self generation in whole or in part for their power supply.

#### **RURAL COOPERATIVE ELECTRIC UTILITIES**

Background for legislative creation of the Rural Electric Administration in the early 1930's was the retarded social and economic condition of vast rural areas of the United States due to unavailability of electricity and the comforts, conveniences and economic benefits to be derived from economical electric service. Private utilities had centered their interest in the populous urban

centers and were reluctant to extend their lines into the sparse population of the farmlands and country towns. To a large extent for sociological purposes, the Federal government undertook a massive program to extend power lines wherever possible to the farmlands and other remote areas.

The means to accomplish the national purpose was to encourage formation of cooperative groups in rural areas and to make available to these groups loans from the government at a very low interest rate (2%) with which to finance construction of distribution lines and other facilities. Additional technical assistance was provided for organization, accounting, plant design and construction, and general surveillance. Among other things, innovations in line construction were developed which greatly decreased construction costs. The government, furthermore, was generous in scheduling loan amortization and delayed payments of interest in the initial operating periods before the projects became self-sustaining. Tax exemptions were also a means of aiding cooperative projects to become self-sustaining, as well as low cost power from Federal and State power systems.

The governmental activities to bring electric service to rural areas also stimulated the private electric utilities to do likewise. As a consequence, during the first twenty-five years of the REA program electrified farms increased from 10.9 per cent to 96.8 per cent of total farms.

As of December 31, 1965 the government had loaned cooperatives approximately \$6 billion in the REA program. Approximately 6.59% of that was made to public power districts, other public bodies and power companies as auxiliary means of implementing the overall program. The program also includes several co-ops, which mainly perform generating and transmission functions.

Not all cooperatives are REA cooperatives, nor are those which have repaid their loans to REA. The operations of cooperatives, moreover, are an important segment of the electric utility industry. So important are REA cooperatives that the statistics published by REA may, for present purposes, be accepted as representing the cooperative segment of the total electric utility industry.

Some pertinent statistics from the 1965 REA report, on electric cooperatives are as follows:

Number of borrowers (including those for which loans have been repaid)	1,052
Miles of energized line	1,566,772
Consumers served	5,541,478
Sales to Ultimate Consumers	41,153 million Kwh
Power Generated	8,834 million Kwh
Power Purchased (includes net interchange and net wheeling)	44,587 million Kwh
Electric operating Revenues and Patronage Capital (charge for service)	\$835,675,000
Average Revenue and Patronage Capital per Kwh, Residential Consumer	2.17 ¢
Average Consumers per mile	3.31
Monthly Average Kwh per Residential Consumer	479 Kwh

Occasionally municipalities become competitors of co-ops in the fringe areas outside municipal boundaries.



## STATE REGULATION AND CONTROL OF MUNICIPAL ELECTRIC UTILITIES

### GENERAL

The major thrust of the Commission form of utility regulation in the United States is (a) to protect the public from exploitation by privately owned utilities from excessive service rates, (b) to assure high quality, safe and adequate service, (c) to prompt orderly utility development to meet the needs of the public, (d) to avoid waste from duplicate service facilities and (e) among other things, to protect public investors in utility securities.

Historically, electric service in early days was introduced by privately owned companies operating both the supply and distribution functions as integrated units within the confines of the towns and cities. Regulatory control, if any, was exercised by local authorities through city councils or franchises. In some cases, apparently, where situations became intolerable, the municipalities took over the electric facilities for operation by the municipalities themselves. In other instances municipalities undertook the supplying of utility services initially. As dissatisfaction with rates and service became more widespread and utility systems expanded, action at the state level became necessary. Thus, in 1907 a movement among the states was initiated by Wisconsin and New York by creation of public utility commissions with comprehensive regulatory jurisdiction over the privately owned utilities, that of Wisconsin also embracing municipally owned utilities, initially.

Some of the states later found it to be compatible with the pattern of public utility regulation to bring municipal utilities also under surveillance of the public utility commissions but this was not a general trend. Today only ten state public utility commissions have comprehensive regulatory jurisdiction over municipal electric utilities comparable to that applicable to private utilities. In five states jurisdiction of the commissions over rates to ultimate consumers is limited to service outside the municipal boundaries with varying degrees of jurisdiction over other phases of municipal electric utility operations. One state, New Mexico, has given the public utility commission jurisdiction over rates and other municipal electric utility matters when the municipality so elects.

Several other commissions have authority over the assignment of territory outside of municipal boundaries which affect municipal utility operations.

The ten states which have vested in their public utility commissions comprehensive regulatory jurisdiction over municipal electric utilities are: Indiana, Maine, Maryland, Massachusetts, Montana, New York, Rhode Island, Vermont, West Virginia and Wisconsin. All of these commissions, with respect to municipal electric utilities, have comprehensive authority to:

1. Prescribe rates.
2. Authorize security issues
3. Prescribe uniform systems of accounts and supplementary regulations including a requirement to file annual accounting reports.
4. Establish service and safety standards.

Concerning rate jurisdiction there are a few minor differences in scope of the authority but no apparent significant difference in administration policies. All ten state commissions have power to initiate rate investigations and to require line extensions in service areas.

There is less uniformity in the ten commissions' authority to require interconnections with other utilities, act as common carrier, provide joint use of facilities. Most of the ten, furthermore, have no powers, or limited powers, to require certificates of convenience and necessity for initial service, make major property additions, abandon facilities or service, issue indeterminate permits, export power across state or international boundaries, and only West Virginia is reported to have unrestricted power to allocate unincorporated territory.

Even in those states which subject municipal electric utilities to regulatory surveillance of a public utility commission, such commissions are without power to assume operating or managerial functions except as may be implicit in compliance with the regulatory matters specifically vested in the commission. Thus, the autonomy of municipal utilities is universal in its basic aspects. We know of no state where this is not true. Even in Nebraska which is fully a public power state, municipal

electric utilities exist independently of the state's public power system, with virtually complete autonomy in their affairs except for required approval of extensions beyond municipal boundaries. They contract with the Nebraska Public Power System as independent agents and many are so interconnected under standard interconnection agreements. In other states, municipal electric utilities which transfer their facilities to a privately owned utility, a public power district or similar public power system, or open their boundaries to private utility operation do so voluntarily, normally by the process of a public election.

Municipal utilities in those states which vest no regulatory powers in a public utility commission, nevertheless are subject to varying degrees of control over their operations and affairs. Where regulatory and surveillance powers under a state constitution have not been vested in a public utility commission they reside in the state legislative body, or such boards or government departments as the legislature may otherwise have designated. It is common that municipal utilities are governed by boards of public officials directly or indirectly responsible to the electorate. We believe it to be universal, moreover, that rates of municipal electric utilities are subject to a legal requirement that they be just and reasonable.

## **RATE REGULATION**

### **GENERAL BASES OF RATEMAKING METHOD**

Rate regulation, in its practical aspects, is a methodology to determine the revenues necessary to meet the financial requirements and preserve the invested capital of the enterprise. For municipal utilities two techniques are available for the purposes of testing rate reasonableness, namely the net investment or fair value rate base method and the financial requirement method.

The net investment or fair value method follows the pattern of ratemaking method for private utilities. A rate base is determined to which is applied a rate of return to arrive at an amount for allowable earnings. This amount when added to the sum of operation expenses, depreciation and taxes, produces the sum to be recovered from rates charged to consumers.



The rate base consists of the net depreciated amount of plant investment minus contributions in aid of construction derived from customers or other sources. Additional allowances are included for cash working capital and stocks of materials and supplies. Ordinarily plant values are the original or construction cost of plant facilities, but in some jurisdictions a fair value rate base is employed wherein judgment is applied, resulting in a weighted result for original cost and other elements such as reproduction cost new, less depreciation.

The rate of return calculation is intended to be sufficient to permit the municipal utility to meet interest on debt obligations plus an additional amount as net earnings. From the net earnings amount and other cash generated from operations, as from depreciation, the utility is provided the means of making plant replacements and retiring debt, etc. The net earnings element also may leave a margin for return to the municipality as income on the portion of total investment in the utility identifiable as equity investment, or for accumulation as a means of reducing future necessity for outside financing.

The financial requirements method of ratemaking is more closely identified with immediate financial requirements. Under this approach, the cost to serve is the sum of operating expenses, interim replacements of plant, taxes, interest, and provision for amortization of debt. Miscellaneous operating revenues are applied as credits.

The broader aspects of justness and reasonableness may take cognizance of elements other than those described above, in special situations.

## DEPRECIATION

The depreciation methods adopted by public utility commissions with comprehensive rate jurisdiction may be expected to be generally the same for municipally owned electric utilities as for those privately owned. Of the ten commissions with comprehensive rate regulation, all, with the exception of New York, according to the recent FPC Survey, have authority to prescribe the



depreciation method and the rates as well as to require depreciation rate studies. The New York Commission lacks authority to prescribe specific depreciation methods, but can prescribe rates for accounting purposes and require depreciation rate studies.

Although virtually all of the commissions have authority to prescribe depreciation method and rates, this power generally serves as a standby power. Some commissions indicate they have prescribed depreciation methods. The Wisconsin Commission may be alone in requiring all utilities annually to submit their depreciation rates for certification. Unless modified, the standard systems of accounts used almost universally by the state commissions, specify depreciation accounting, but do not prescribe the particular method to be used. Consequently, while the commonly accepted and required method is the straight line method, the commissions will not reject other methods where another method in the particular case may be proved and deemed appropriate. Undoubtedly this is the case even where the commission indicates it prescribes a particular method.

The only method indicated to have been prescribed is the straight line method. Only two commissions indicate acceptance of present value or sinking fund methods and this is indicated as an alternate to the straight line method, probably for special cases. The straight line method, therefore, is virtually universally used in the U. S. Straight line remaining life, we believe, is also accepted within the definition of straight line method.

In the reported rate cases involving municipal utilities where depreciation was a point at issue, the controversy and settlements concerned matters such as excessiveness or deficiency in straight line rates.

## **TAXES AND TAX EQUIVALENTS**

For municipal utilities, the consensus of opinion among the regulatory commission, we believe, is that taxes and tax equivalents should not be reported unless they are actually paid to the taxing authorities. Such has been the finding in several contested cases. Since municipal utilities are

exempt from State and Federal income taxes, provisions for these have been disallowed. However, the following kinds of generally applicable taxes are allowed in the cost to serve: state public utility tax, in lieu taxes, property tax, social security taxes, and city and state gross earnings tax.

The matter of allowable taxes sometimes presents a dilemma such as where municipal ownership of a utility system may affect the share of state tax revenues which would be allocated to the municipality if the utility facilities were privately owned. These situations as well as others where legal or other considerations cause omission or understatement of taxes or tax equivalents affect general revenues of the municipality as compared to those obtainable if the utility system were privately owned. Such situations undoubtedly are considered by some regulatory commissions in order to permit commensurate earnings distributions to the municipality's general funds.

A related matter is that of interdepartmental services. Free electric services to the municipality and its other departments is in effect a tax on the municipal utility facility. The consensus of opinion on this matter, we believe, is that such services should be billed by the utility at tariff rates and revenues reported by the utility. A similar belief holds for services received by the utility from the municipality including administrative services.

## **RATE OF RETURN**

Rate of return is an earnings allowance factor under the net investment or fair value basis of ratemaking. The general objectives of the return allowance are as follows:

- (a) Meet interest requirements on outstanding debt related to utility operations.
- (b) Provide a reasonable return on the municipality's equity in the overall utility investment in facilities, working capital, etc., for distribution to the municipality.
- (c) Permit a reasonable addition to the utility department's surplus account or plant extension reserve.

Within such a standard of reasonableness there is a range of policy affecting items (b) and (c). Some municipal utilities seeking the lower levels of reasonable rates may minimize items (b) and (c). Circumstances may persuade other municipal utilities to adopt a less liberal policy within the general range of overall reasonableness and rate comparability. Prime responsibility rests with the municipal utility for determining its financial requirements and rate structure and for defending their justness and reasonableness.

#### **ACCOUNTING AND REPORTING PRACTICES**

Municipally owned electric utilities in fourteen states are required by law to use a comprehensive uniform system of accounts which is also applicable to privately owned utilities. Included in this count are two states where the regulatory commissions have no jurisdiction over municipal electric utility rates; and two states where the public utility commission's regulatory jurisdiction over municipal electric utility rates is limited to those for service outside corporate limits.

The fourteen states do not include Tennessee and Washington where the public utility commissions have no regulatory jurisdiction over municipal utilities but municipal utilities are otherwise subject to comprehensive accounting and reporting requirements. Municipal electric utilities and cooperatives which distribute TVA power are dominant in Tennessee. These utilities, by contract with TVA, are obliged to use the uniform system of accounts prescribed by the Federal Power Commission and to meet other specified accounting requirements. This applies to a number of municipal and cooperative utility customers of TVA located in Alabama, Georgia, Mississippi and Kentucky where the public utility commissions have no jurisdiction over municipal utilities. In the State of Washington, municipal electric utilities and public utility districts, which obtain power from Bonneville Power Administration, are dominant. Here the State Auditor exercises surveillance over the accounting of municipal utilities and public utility districts and has prescribed an accounting system paralleling the FPC system of accounts.



In seventeen states, municipal electric utilities are required to file annual financial reports with the public utility commissions. This count includes seven states which either have no comprehensive regulatory powers over municipal electric utilities or only limited powers. It is believed the state commissions generally accept reports on forms prescribed by the Federal Power Commission under that Commission's general power to gather national information concerning the electric utility industry.

The most comprehensive source of accounting, operating, and financial information concerning municipal and other publicly owned electric utilities is the annual FPC publication "Statistics of Publicly Owned Electric Utilities in the United States." The Commission solicits annual reports from about 700 municipal and other publicly owned electric utilities with annual operating revenues in excess of \$250,000. Of the number solicited, about 100 fail to respond and approximately 100 submit reports inadequate or deficient for statistical compilation. We are informed a considerable number of the remaining reports require analysis and correspondence to adapt them for publication.

Although the deficient report experience of FPC is more common in states where the regulatory commissions lack jurisdiction over the accounting practices of municipal and other publicly owned utilities, this fact is not representative. Information obtained from FPC indicates that none of the larger cities is in the deficient reporting group. Moreover, many of the reporting municipalities which submit comprehensive reports and full disclosure are in states where the public utilities commissions are without accounting jurisdiction. Also, it is indicated that the FPC encounters problems in obtaining reports, or satisfactory ones, even in states where the public utility commissions have comprehensive accounting jurisdiction with respect to municipal utilities.

It is apparent, therefore, that local determination of modern, sound administrative and accounting policies is superior to perfunctory regulatory commission surveillance, in the development of adequate accounting and reporting practices for public disclosure and comparison of operating results, according to conventional standards.



## EXTENSIONS OF ELECTRIC SERVICE OUTSIDE OF MUNICIPAL BOUNDARIES

The rights and obligations of municipalities to extend electric service lines to areas contiguous to municipal boundaries has so many facets that a conclusion with respect to a particular state would require a well researched legal opinion. Accordingly, it appears impracticable to generalize for the entire United States, where there are wide and subtle differences in statutes relating to powers granted to municipalities under State constitutions, Court-implied powers and obligations related to statutes apart from those specifically bearing on municipal electric utilities. Among the states some seemingly parallel cases have conflicting decisions.

Examination of reported cases in various parts of the United States makes it apparent that discretion is an important element both on the part of the municipality in extending its facilities to serve customers beyond its boundaries and by a commission or other agency obliged to approve such extensions. Even where there is statutory permission for such extensions there may be countervailing limits to such authority. Restrictions may occur where there would be invasion of territorial rights of private utility or a co-operative already able and willing, or in fact, providing adequate service at reasonable rates or where the extension may be uneconomic and burdensome on the customers or taxpayers within the municipality.

In general it appears, however, that a municipality may not be compelled to extend service beyond its corporate boundaries, possibly excepting critical special situations and where the municipality is saved from extraordinary expense or where subject to state commission regulation.

## MUNICIPAL CONTROL OF OWN POWER SUPPLY FACILITIES

Overriding in significance is the right of a municipality in the United States to own and operate its own generating facilities and reserve to itself the output therefrom. However, there exists a trend to integrate power production facilities, public and private, into a coordinated system. In some instances this involves common or joint ownership of facilities. One basic objective is to achieve greater service reliability from connection to alternate power sources, thereby lessening

substantial investment in standby facilities. Attractive also is the possibility of lower cost power by adapting common system power flows to differences in hourly and seasonal peaks of the system participants. Another advantage, for example, is that of low cost power available periodically from shared output of hydroelectric stations when stream flow is abundant. Construction of super power stations also permit economies beyond reach of smaller stations designed solely for local service. Local facilities, nevertheless serve a useful common purpose in sharing the stations' peak load capability, thereby allowing the lower cost super station power to serve a larger portion of base loads as well as the balance peak variances over wider areas. This, of course, is an over-simplified statement of the economics of power system integration as it is developing in the United States.

After an exhaustive study of the power supply problem in the United States, the Federal Power Commission in 1964 issued a report on National Power Survey. That report has the obvious purpose to serve as a guide to coordinated development in the national interest of power system networks, open to participation by public, private, municipal and cooperative utilities to achieve the substantial benefits of low power costs from super power stations, mine-mouth generating stations, inter-system and inter-area load coordination and to achieve minimum overall power plant investment and fuel costs over large areas. The Federal Power Commission, moreover, has assumed leadership in measures to preserve integrity of the municipal utilities, cooperatives and other individual and small systems. The following is quoted from the National Power Survey:

“ The small systems in the electric power industry are understandably concerned about their future welfare as elements of the complex industry structure which serves America's electric consumers. They fear that the growing emphasis on the economies of scale in generation and transmission will reduce their opportunities for the orderly expansion of their own generating capacity, and perhaps even threaten their survival.

“ The interests of the small systems are a matter of vital concern in this National Power Survey. Small systems must recognize the need for obtaining their power supply from low cost sources and there must be opportunity for them to do so. Participation of the small systems in the benefits of coordination and a continuous search for means of broadening this participation are fundamental if these systems are to continue to provide low cost power to their consumers and make the most efficient use of our fuel and capital resources. Reduction in the costs of generation of the larger systems through more extensive adoption of the concepts discussed in the Survey can and must provide attractive sources of power for the use of small systems, rather than serve as a threat to their existence.

“ We define ‘small systems’ for the purposes of this discussion, in order to provide a statistical breaking point, as those having annual energy production or requirements of less than 100 million kilowatt-hours. The definition is necessarily arbitrary. Assuming an annual load factor in the range of 45 per cent, the definition would represent a system with peak load requirements of about 25,000 kilowatts or less. While the small systems are mainly municipal systems or rural electric cooperatives, they also include almost 300 small investor-owned systems.”





VAN SCOYOC & WISKUP, INC.  
Public Utility Consultants  
1735 K Street, Northwest  
Washington, D. C. 20006

August 15, 1968

The City Commissioners  
The City of Edmonton  
City Hall  
Edmonton, Alberta, Canada

Gentlemen:

In accordance with your request we submit our comments and opinions concerning the rate of return earned by the City's electric utility system and other financial information, including certain rate and statistical comparisons.

#### GENERAL

The City of Edmonton's electric utility system operations are conducted by two departments, (1) Edmonton Generation and Water Treatment and (2) Edmonton Power, the latter being the distribution department of the electric system. Because of such departmentalization it was necessary to consolidate the reported financial data for both departments in order to determine the rate of return earned by the electric utility system of the City and to facilitate analysis and the making of significant comparisons of financial data.

Our studies of the Edmonton electric utility system have been based on data obtained from the published reports of the two departments for the period from 1953 to 1967, inclusive, as supplemented by information furnished by officials of the two electric departments.

## RATE OF RETURN EARNED

For the purpose of computing the rate of return we have related the Electric Net Operating Income to Net Electric Plant Investment to obtain a percentage figure in accordance with the conventional practice followed in utility analysis.

To satisfy ourselves that costs relevant to the determination of rate of return have not been omitted from the electric utility accounts, or grossly understated therein, we made inquiries to responsible officials and called for certain data from utility records. Based on the information received we believe that the rate of return computations fairly and reliably portray the situation as it exists and that the practices of Edmonton affecting such computations, as reflected by its records, conform to recognized standards and are acceptable for the use we have made of them.

One element of utility cost in particular, namely depreciation and amortization of expenditures for acquiring plant assets, necessarily represents estimates founded on judgment. This matter was given close attention in our study of rate of return. We made sufficient analysis to be satisfied that Edmonton's practices, having resulted in accumulated depreciation amounting to approximately 28% of gross electric utility plant at December 31, 1967, and an annual provision for 1967 of approximately 3.3% of gross plant, are within reasonable limits. We note that these relationships compare favorably with those of the group of publicly owned utilities in the United States which have been used for comparative purposes (Schedule B). We base our judgment also on substantial knowledge of the practices of the privately and publicly owned electric utilities throughout the United States.

For the year 1967, Edmonton's rate of return was approximately 13.4%, obtained by computing the ratio of Net Operating Income of \$6,630,342 to average net plant amounting to \$49,564,452. This computation is shown on Schedule A-1 attached hereto. Net Operating Income represents the excess of gross operating revenues over the sum of deductions for operation, maintenance, administration, provisions for depreciation and amortization and tax payments to the City. The cash funds represented by such Net Operating Income are used to pay debenture interest,

finance a portion of the capital expenditures for plant assets acquired through plant extension reserves and to contribute residual monies (in addition to tax payments made and treated as electric utility operating expense) to the general revenues of the City of Edmonton.

Schedule A-2 shows historical data for the years 1954 to 1966, inclusive, concerning Edmonton's rate of return from electric utility earnings. In preparing the historical data for such years it was not considered practicable or necessary to separate the relatively small portion of the aggregate amounts which is applicable to water treatment operations. In our judgment, the historical data presented in Schedule A-2 reasonably portray the approximate rate of earnings on electric utility operations for the period indicated.

The rates of return shown in Schedule A-2 ranged from a low of 10.83% for 1960 to a high of 17.63% for 1955. The average rate of return earned for the 13-year period was 12.9%.

Although the data and rate of return shown in Schedule A-1 for 1967 reflect the separation of the results of water treatment operations from those of Edmonton's electric utility operations, we regard the end results shown in Schedules A-1 and A-2 as being adequately comparable for the purposes at hand. The effect of excluding water treatment operations on the results shown in Schedule A-2 would be very small.

Schedule A-3 shows the annual payments which the Edmonton electric utility system (including water treatment operations) has made to the City's general funds for taxes and distribution of its net utility earnings for the years 1953 to 1967, inclusive. It will be noted that the payments into the City's general revenues by the electric utility system (including water treatment) has increased from \$1,094,991 for 1953 to \$7,224,814 for 1967 and amounted to a total of \$53,210,986 for the fifteen year period. Total payments of \$7,244,814 for 1967 included \$7,086,347 applicable to electric utility operations.

Schedule A-4 shows Edmonton's provisions from electric utility earnings for amounts applied to financing plant extensions for the years 1953 to 1967, inclusive. The relatively small



portion of the totals which is applicable to water treating operations has not been separated in preparing these data except for the year 1967.

The total of the funds generated from operations and applied to financing electric plant extensions consists of:

1. Depreciation provisions recovered through utility revenues over and above amounts of amortization provided from revenues to meet debenture redemption schedules; and
2. Allocations of net utility revenues reserved to pay for plant extensions without issuance of debentures to raise such capital funds.

These figures are significant since they disclose internally generated funds (obtained principally from electric utility operations) which have been applied to finance plant additions.

For the fifteen-year period 1953 to 1967, inclusive, the electric plant extension funds from depreciation provisions amounted to \$13,819,676 and the allocations from net revenues amounted to \$22,531,839. A small portion of these amounts applies to water treatment operations. The sum of the two components is \$36,351,515.

The provisions for 1967 were separated between electric utility and water treatment operations. The electric utility portion of the total of \$1,775,874 for 1967 amounts to \$1,550,301.

Schedule A-5 shows Edmonton's provisions (years 1953 to 1967, inclusive) from electric utility earnings for amounts applied to redemption of outstanding debentures issued for acquisition of plant assets. The relatively small portion of the totals which is applicable to water treatment operations has not been separated on Schedule A-5 except for the year 1967.

The amounts shown in this tabulation represent not only cash transactions incidental to paying off debt incurred in financing acquisition of electric and water treatment properties, but are also the amounts used by Edmonton to record depreciation and amortization applicable to such



properties. While this method of accounting for plant depreciation does not result in annual depreciation expense for any given property unit which is equivalent to straight line depreciation as computed for any particular year, the effect of either method is to amortize plant cost over a period which is reasonable, assuming the bond redemption period approximates plant service life. We do not prefer this method of amortizing cost over straight line depreciation accounting as a general rule, but we are satisfied that the results of its use by Edmonton can be accepted as reasonable, although accounting refinements undoubtedly could be made.

Combining the provisions for depreciation in the amount of \$13,819,676, for the years 1953 to 1967, shown on Schedule A-4 with bond redemption reservations for the same period of \$8,049,431, as shown by Schedule A-5, it is indicated that Edmonton has provided \$21,869,107 out of utility earnings for depreciation and amortization of electric utility and water treatment plant during that 15-year period. This has resulted in accumulated depreciation provisions of \$19,314,088 on electric utility plant as of December 31, 1967, which amount is equivalent to approximately 28% of Edmonton's investment in electric utility plant.

The amortization provision equivalent to bond redemption shown for 1967 on Schedule A-5 was separated between electric utility and water treatment operations. The electric utility portion of the total of \$992,893 for 1967 amounts to \$931,815.

In addition to the financial analyses already discussed herein and summarized in the attached schedules, we have computed the ratio at each year end from 1953 through 1967 of the net outstanding debentures of the electric utility and water treatment operations to net plant investment.

Such ratios are as follows:

1953 - 26.0%	1961 - 45.0%
1954 - 31.1	1962 - 44.1
1955 - 30.0	1963 - 41.7
1956 - 26.8	1964 - 41.9
1957 - 25.9	1965 - 44.1
1958 - 38.3	1966 - 46.1
1959 - 38.1	1967 - 45.3
1960 - 46.6	

## COMPARISON OF FINANCIAL DATA

Schedule B is a table showing certain basic financial data and relationships for the Edmonton electric utility system and each of twelve municipally owned electric utilities located in various sections of the United States, as follows:

Kansas City, Kansas  
 Lansing, Michigan  
 Orlando, Florida  
 San Antonio, Texas  
 Sacramento, California

Tennessee Valley Authority Area:  
 Huntsville, Alabama  
 Chattanooga, Tennessee  
 Knoxville, Tennessee  
 Memphis, Tennessee  
 Nashville, Tennessee

Bonneville Power Administration Area:  
 Seattle, Washington  
 Tacoma, Washington

The basis of selection was primarily geographical distribution which affords a variety of situations as to the type of generation responsible for the power supply of the utility as well as a range of utility size from the standpoint of the volume of electricity sold. Four of those selected sell about the same number of kilowatt hours annually as Edmonton while the other eight sell up to four times as many as Edmonton.

Data for Edmonton relate to the year 1967 while 1966 data are shown for the United States municipal utilities. Dollar amounts applicable to Edmonton are stated in Canadian dollars. Others are stated in U. S. dollars.

Lines 1 to 6, inclusive, show the items comprising total utility capitalization and the ratio of debt to the total. The debt ratio varies widely from zero to 65.5%. Edmonton, at 43.7%, is near the median of the group.

The percentage rate of return earned as shown on line 9 was obtained by computing the ratio of the net operating income shown on line 7 to the net electric plant investment as stated on line 8. Because of the absence of information as to the working capital components of United States municipal electric utilities, we have omitted consideration of this item in determination of the rate of return earned. Edmonton with 13.4% has the highest rate of return. An appropriate working capital allowance as estimated for Edmonton is \$1,300,000, and on this basis, the rate of return earned for 1967 would be 13.04%.

The rates of return earned for 1966 for the twelve United States municipal electric systems ranged from 11.0% to 2.8%. The median is 5.3%. None of the municipal systems listed have their rates subject to regulation by state commissions. Our review of the return earned by twelve smaller municipal electric utilities subject to rate regulation by seven state commissions indicates a similar divergence among particular municipalities, however, the lowest return was 4.7% and the highest return 27.9%. <sup>(1)</sup>

In evaluating these percentage rates of return, it is necessary to give particular consideration to the items of taxes, tax equivalents and distributions made to the general fund of the municipality and electric service furnished to other city departments. In calculating the rates of return, only those taxes, tax equivalents, distributions and services that were charged by the municipal electric system to operating expenses were given consideration. As indicated by lines 25 and 26 of Sheet 2, Schedule B, the accounting and reporting treatment of these items vary substantially among the municipal electric systems.

Moreover, the rate objectives of the municipal systems and their policies in regard to the financing of plant additions also influence the earned rates of return. Some systems, particularly those in the TVA and BPA areas, have low consumer rates as their primary objective. Other municipal systems attempt to retain sufficient earnings to provide for all capital improvements other than major generating stations.

(1) *Anderson, Ind., Ft. Wayne, Ind., Richmond, Ind., Hagerstown, Md., Holyoke, Mass., Peabody, Mass., Taunton, Mass., Jamestown, N. Y., Plattsburgh, N. Y., Burlington, Vt., Manitowac, Wisc. and Colorado Springs, Colo.*



Annual and accumulated provisions (reserve) for depreciation and amortization and the relationship of such items constitute the focus in lines 10 to 14, inclusive. The ratios of the accumulated reserves to gross electric plant investment vary from 11.0% to 45.8%. Edmonton, with 28.2% is near the median of the group. The approximate rate of annual depreciation expense on gross plant investment is shown on line 14. Such annual rate falls in a range from 1.5 to 4.0%. Edmonton's annual provision at 3.3%, is higher than each of the U. S. utilities included on the Schedule except two. The median for the group is 2.8%.

We made sufficient investigation of Edmonton's depreciation accounting practices to be satisfied that the overall results are reasonable and acceptable for the purposes used herein. We did not attempt, however, to check the items of plant carried on the company's books to a physical inventory, nor did we deem such a procedure necessary to establish the validity of Edmonton's plant and depreciation accounts for the purposes for which we have used such data.

The next ratio developed on Schedule B is the times interest earned rate (lines 15 to 20, inclusive). In making this computation the amount treated as available to meet interest payments is income before providing for depreciation and amortization, taxes or interest, as calculated on lines 15 to 19, inclusive. This formula is based on conventional practice. It does not treat debt redemption as having priority over interest payments in the utilization of funds available from current operations.

The schedule shows that the interest requirement for most of the utilities listed is quite low in relation to the funds available. Each utility earned its interest requirement at least 2.9 times under the formula used. Edmonton earned its interest requirement 8.8 times, the highest for the group except those utilities whose ratio of debt to total capitalization was less than 20%.

The "operating ratio" can also be used to make a comparison of utilities. This is the relationship of operating expenses, including depreciation and amortization and taxes, to operating revenue. While no particular ratio can be said to constitute a norm or standard, it is evident that a relatively high operating ratio suggests that a greater margin between operating expenses and revenues may be desirable but not necessarily essential. The objectives of the utility operation, as well as the



mix of hydro and steam generation and distribution investments, will influence the operating ratio.

Among the utilities compared in Schedule B, Edmonton has one of the lowest operating ratios at 61.8%. The lowest of the group was 55.9%. Edmonton's relatively low operating ratio, together with its relatively low consumer rates in comparison with rates of the municipal utilities listed which depend on fossil fuel generation, indicate that Edmonton's utility operations are conducted efficiently. We are not aware of any facts to indicate that Edmonton's quality of service is inferior.

The ratio of gross revenues to net plant is another basis for comparing electric utilities. This ratio ranges from 12.3% to as high as 63.5% in the group. Edmonton's is 35.0% while the median for the group is about 26%.

The last section of Schedule B shows a comparison of amounts reported by the utilities for taxes and other contributions to governmental units such as tax equivalents, contributions of services and distributions of net earnings. The total of such items is broken down between those amounts charged as operating expense by the utility and the amounts reported as applicable to this classification but not included in operating expenses. Edmonton shows a substantial allocation of its net electric utility earnings to the City's general revenues. Similar distributions were reported by four of the U. S. municipal utilities.

The proportion of gross operating revenues represented by amounts reported as taxes, tax equivalents, services and distributions varied substantially among the various utilities. Edmonton and Orlando, Florida have the highest ratios with 40.8% and 21.8% respectively. The others vary from 1.0% to 18.4%. The source of our information on these items for the U. S. municipal utilities is their annual reports to the Federal Power Commission. It is not certain, however, that the data reported are complete and have been stated on a uniform basis by all of the utilities.

The ratio of the total reported for taxes, tax equivalents, services and distributions to net plant investment is shown on line 29 of Schedule B. Edmonton has the highest ratio on this

basis with 14.3% and Orlando is next with 5.6%. The rates for the other utilities range from 0.2% to 5.3%.

It would appear from the data reported that Edmonton transfers a significantly greater proportion of its electric utility revenues to the general revenues of the City than the U. S. utilities included in Schedule B. We call attention, however, to the fact that Edmonton's transfer of net earnings to reserve for plant extension was abnormally low for 1967, as shown by Schedule A-4. This accounts in part for the level of 40.8% for the ratio as shown on line 28 of Schedule B.

#### **COMPARISONS OF SALES, REVENUE, CUSTOMERS AND POWER SUPPLY**

Schedule C shows comparative data for the Edmonton electric utility system and each of the twelve United States municipal electric utilities as to sales, revenues, customers and power supply together with certain unit averages.

The schedule on lines 1 through 30, shows the results of computations of average revenue per kilowatt hour, of average annual revenue per customer, as well as average annual kilowatt hour consumption per customer for each principal class of service. Dollar amounts applicable to Edmonton are shown in Canadian dollars. Others are stated in U. S. dollars. Total sales, revenue and average revenue of each utility listed are shown on lines 31, 32 and 33. Data relating to generation volume, purchased power and generator capacity are shown on lines 35 to 42, inclusive.

Edmonton's average revenues per kilowatt hour are lower, in each of the principal customer classes and in total, than those of the United States' utilities included in Schedule C which depend entirely or principally on fossil fuels for generation. Those whose supply is government generated power from the Tennessee Valley Authority have lower average revenues per kilowatt hour than Edmonton. Likewise, the cities of Seattle and Tacoma, Washington, obtain a portion of their power supply from the Bonneville Power Administration. The cost of purchased power from these government projects ranges from 2.2 to 4.1 mills, as shown on line 38.

The relatively low level of Edmonton's revenues per kilowatt hour for residential sales is underscored by the fact that its usage and average revenues per customer are among the lowest for the companies reported in Schedule C. The cost of natural gas is undoubtedly an important factor in accounting for the relatively low customer usage in Edmonton. It can be noted, however, that while Edmonton's average annual kilowatt hours per residential customer is only 4,089, the comparable kilowatt hours for Kansas City, Kansas, is even less at 3,625.

## **RATE COMPARISONS**

### **(1) ALBERTA ELECTRIC UTILITIES**

A comparison of the rates charged by two other municipal electric systems and the three privately owned utilities in Alberta, with the rates of the municipal electric system shows that the Edmonton rates are generally lower. Schedule D. sheets 1, 2, and 3, set forth the monthly billing amounts for particular kilowatt hour (Kwh) consumptions, based upon our analysis of the rate schedules which have been furnished to us. These particular kilowatt hour consumptions are those which the Federal Power Commission uses in its annual publication "Typical Electric Bills" for residential, commercial and industrial service.

Sheet 1 of Schedule D pertains to Domestic (Residential) service. In addition to the minimum bill, the monthly consumptions used are 100, 250, 500, 750, and 1,000 kilowatt hours. The 100 kilowatt hours bill generally applies to lighting, refrigeration and small appliances. The 250 kilowatt hours bill reflects the addition of cooking. The 500, 750 and 1,000 kilowatt hours consumptions include water heating usage and also reflect larger sized residences.

These data show that with the exception of the minimum bill and the 100 kilowatt hours bill of the City of Calgary and the D-13, Beverly and Jasper Place bills of Calgary Power Company, the City of Edmonton municipal electric system provides residential rates that are lower than those of the other municipal and privately owned electric systems in Alberta.



The General Service (Commercial) rate comparison (Sheet 2) shows that the City of Edmonton municipal electric system monthly bills are lower in each demand and consumption category than the bills of the other municipal and privately owned power systems, with the exception of Calgary Power Company's 3 Kw - 375 Kwh, 6 Kw - 750 Kwh consumption and the C-3 and C-4 rate schedules for the 12 Kw - 1,500 Kwh consumption.

In the Primary Service (Industrial) classification shown on Sheet 3 of Schedule D, the monthly bills of the City of Edmonton municipal electric system are lower than for the other municipal systems and those of Calgary Power Company, with the exception of the City of Calgary for the 300 Kw - 120,000 Kwh, 500 Kw - 200,000 Kwh and the 1,000 Kw - 400,000 Kwh consumptions.

## **(2) UNITED STATES MUNICIPAL UTILITIES**

Rate comparisons similar to those shown on Schedule D have also been made for the City of Edmonton municipal electric system and the twelve United States municipal electric utilities previously mentioned in this report. These data are shown on Schedule E.

It is evident from Sheet 1 of Schedule E that the Domestic rates of the City of Edmonton compare very favorably with the rates of the U. S. municipal electric utilities which do not have access to low cost Federal power in the TVA and BPA areas. However, the monthly bills of the City of Edmonton are not significantly higher than those of the U. S. municipal systems in such areas except for the minimum bill and the higher consumptions of 750 and 1,000 Kwh.

In the General Service category shown on Sheet 2, the monthly bills of the City of Edmonton's municipal electric system are generally lower for all billing demands and monthly consumptions than for the U. S. municipal systems outside of the TVA and BPA areas. The only municipal system outside of those areas where the bills are consistently lower than for Edmonton is that of the City of Sacramento, California. This municipal system purchases a large share of its electric energy from the U. S. Bureau of Reclamation at a cost of 4.3 mills per kilowatt hour.



Sheet 3 shows the Industrial service monthly bills of the City of Edmonton municipal electric system and of the twelve United States municipal electric systems for five billing demands and ten kilowatt hour consumptions. Again, these comparisons indicate that the bills of the Edmonton municipal electric system are generally lower than the bills of the U. S. municipal utilities which do not enjoy TVA or BPA power. The only exception is the City of Sacramento municipal system.

Respectfully submitted,

VAN SCOYOC & WISKUP, INC.

s/s Melwood W. Van Scoyoc

Melwood W. Van Scoyoc  
President



## CITY OF EDMONTON

Electric Utility Operations  
Average Net Electric Plant and  
Rate of Return Earned  
Year 1967

<u>Line No.</u>	<u>Items (1)</u>	<u>Amount (2)</u>
	<u>Net Electric Plant</u>	
1	Average Gross Plant	\$68,878,540
2	Average Accumulated Depreciation and Amortization	<u>19,314,088</u>
3	Average Net Plant - 1967	<u>\$49,564,452</u>
	<u>Net Operating Income (Electric)</u>	
4	Operating Revenues	<u>\$17,346,820</u>
	Deductions:	
5	Operation	\$ 4,084,159
6	Maintenance	1,451,393
7	Administration	1,031,965
8	Depreciation and Amortization	2,265,629
9	Taxes	1,883,332
10	Total Deductions	<u>\$10,716,478</u>
11	Net Operating Income	<u>\$ 6,630,342</u>
	<u>Rate of Return - Electric</u>	
12	Rate of Return Earned (ratio of net operating income to average net plant)	13.4%





## CITY OF EDMONTON

Electric Utility Operations 1/  
 Historical Annual Rates of Return Earned  
 Years 1954 to 1966, Inclusive

<u>Year</u> (1)	<u>Average Net Utility Plant</u> (2)	<u>Net Operating Income</u> (3)	<u>Rate of Return Earned</u> (4)
1954	\$ 13,542,072	\$ 2,238,750	16.53%
1955	15,942,972	2,811,063	17.63
1956	19,176,774	3,004,724	15.67
1957	23,616,439	3,257,769	13.79
1958	29,132,060	3,940,609	13.53
1959	33,822,423	4,099,971	12.12
1960	37,306,682	4,040,441	10.83
1961	40,107,883	4,614,435	11.51
1962	42,273,612	5,095,124	12.05
1963	44,056,345	5,690,019	12.92
1964	46,063,002	5,757,245	12.50
1965	48,710,468	6,159,306	12.64
1966	<u>51,244,189</u>	<u>6,896,691</u>	<u>13.46</u>
Totals	\$444,994,921	\$57,506,147	12.92%

1/ Amounts applicable to water treatment operations, representing a relatively small portion of the amounts shown herein, have not been separated.



## CITY OF EDMONTON

Electric Utility Operations 1/  
 Historical Summary of Annual Payments  
 to City for Taxes and Allocations of Net Earnings  
 Years 1953 to 1967, Inclusive

Year (1)	Taxes -		Allocation of Net Earnings (4)	Total (5)
	Franchise & Real Estate (2)	5% On Revenue (3)		
1953	\$ 262,500	\$ 399,546	\$ 432,945	\$ 1,094,991
1954	265,000	441,764	424,231	1,130,995
1955	240,000	510,655	402,432	1,153,087
1956	357,000	561,288	626,365	1,544,653
1957	378,000	588,721	1,184,436	2,151,157
1958	406,000	664,791	1,473,613	2,544,404
1959	427,000	740,688	1,875,927	3,043,615
1960	441,000	803,417	2,234,223	3,478,640
1961	469,000	865,584	2,326,087	3,660,671
1962	454,835	929,052	2,562,524	3,946,411
1963	464,239	1,013,712	3,047,825	4,525,776
1964	504,078	1,076,457	3,767,376	5,347,911
1965	527,885	1,180,731	4,037,851	5,746,467
1966	528,904	1,248,499	4,819,991	6,597,394
1967	<u>627,514</u>	<u>1,324,238</u>	<u>5,293,062</u>	<u>7,244,814</u>
Totals <u>1/</u>	\$6,352,955	\$12,349,143	\$34,508,888	\$53,210,986
1967 (Electric only)	\$ 627,514	\$ 1,255,818	\$ 5,203,015	\$ 7,086,347

1/ Amounts applicable to water treatment operations, representing a relatively small portion of the amount shown herein, have not been separated except as shown with respect to the year 1967.





## CITY OF EDMONTON

Electric Utility Operations 1/  
 Historical Summary of Annual Allocations from  
 Earnings to Reserves for Plant Extensions  
 Years 1953 to 1967, Inclusive

<u>Year</u> (1)	<u>Funds from Depreciation Provisions</u> (2)	<u>Allocation of Net Earnings</u> (3)	<u>Total</u> (4)
1953	\$ 322,668	\$ 1,473,944	\$ 1,796,612
1954	401,309	1,699,747	2,101,056
1955	424,368	2,252,741	2,677,109
1956	552,860	2,199,062	2,751,922
1957	674,978	1,879,622	2,554,600
1958	720,623	2,096,390	2,817,013
1959	910,583	1,700,994	2,611,577
1960	969,359	1,200,499	2,169,858
1961	1,067,813	1,407,159	2,474,972
1962	1,105,957	1,616,946	2,722,903
1963	1,152,052	1,685,326	2,837,378
1964	1,313,466	1,043,311	2,356,777
1965	1,328,846	1,098,097	2,426,943
1966	1,366,419	910,502	2,276,921
1967	<u>1,508,375</u>	<u>267,499</u>	<u>1,775,874</u>
Totals <u>1/</u>	\$13,819,676	\$22,531,839	\$36,351,515
1967 (electric only)	\$ 1,333,814	\$ 216,487	\$ 1,550,301

1/ Amounts applicable to water treatment operations, representing a relatively small portion of the amounts shown herein, have not been separated except as shown with respect to the year 1967.



## CITY OF EDMONTON

Electric Utility Operations 1/

Redemptions Out of Earnings of Debentures  
 Issued for Acquisition of Plant Assets  
 Years 1953 to 1967, Inclusive

<u>Year</u> <u>(1)</u>	Generation and Water <u>1/</u> Treatment <u>(2)</u>	<u>Distribution</u> <u>(3)</u>	<u>Total</u> <u>(4)</u>
1953	\$ 72,485	\$ 102,277	\$ 174,762
1954	67,536	124,234	191,770
1955	68,128	178,210	246,338
1956	68,558	224,971	293,529
1957	54,285	255,024	309,309
1958	68,077	284,418	352,495
1959	107,601	366,101	473,702
1960	125,532	393,470	519,002
1961	160,969	472,380	633,349
1962	168,719	501,138	669,857
1963	186,210	533,046	719,256
1964	195,097	559,596	754,693
1965	221,480	600,109	821,589
1966	247,428	649,459	896,887
1967	<u>259,735</u>	<u>733,158</u>	<u>992,893</u>
Totals	\$2,071,840	\$5,977,591	\$8,049,431
1967 (electric only)	\$ 198,657	\$ 733,158	\$ 931,815

1/ Amounts applicable to water treatment operations, representing a relatively small portion of the amounts shown herein, have not been separated except as shown with respect to the year 1967.





CITY OF EDMONTON

Financial Data and Ratios  
Edmonton and Certain U.S. Municipal Electric Utilities  
Year 1966

(000's Omitted from Dollar Amounts)

Line No.	Item (1)	TVA Area										BPA Area			
		Edmonton (1967) (2)	Kansas City, Kan. (3)	Lansing, Mich. (4)	Orlando, Fla. (5)	San Antonio, Texas (6)	Sacramento, Calif. (7)	Huntsville, Ala. (8)	Chattanooga, Tenn. (9)	Knoxville, Tenn. (10)	Memphis, Tenn. (11)	Nashville, Tenn. (12)	Seattle, Tacoma, Wash. (13)	Wash. (14)	
<u>Capitalization</u>															
1	Debt	\$25,368	\$13,150	\$ 3,050	\$ 63,675	\$ 51,865	\$173,633	\$ 3,517	\$ -	\$10,145	\$157,106	\$44,183	\$162,845	\$151,290	
2	Surplus (earned & other)	32,402	67,480	65,976	42,367	218,834	110,648	18,646	42,053	41,748	79,060	58,048	145,712	78,196	
3	Operating Reserves	-	735	15,923	-	129	300	-	357	67	1,000	205	2,418	25	
4	Contributions in Aid														
4	of Construction	302	363	3,856	-	6,068	1,018	77	1,835	791	4,495	903	5,366	1,332	
5	Total Capitalization	\$58,072	\$81,728	\$88,805	\$106,042	\$276,896	\$285,599	\$22,240	\$44,245	\$52,751	\$241,661	\$103,339	\$316,341	\$230,843	
6	Per Cent - Debt of Total	43.7%	16.1%	3.4%	60.0%	18.7%	60.8%	15.8%	0.0%	19.2%	65.0%	42.8%	51.5%	65.5%	
<u>Return Earned</u>															
7	Net Operating Income	\$ 6,630	\$ 2,865	\$ 5,039	\$ 7,480	\$ 18,668	\$ 13,424	\$ 2,215	\$ 2,067	\$ 2,703	\$ 11,635	\$ 4,317	\$ 9,828	\$ 4,442	
8	Net Electric Plant	49,564	56,858	45,799	75,180	177,693	229,724	21,088	38,902	50,983	192,515	93,740	274,696	160,518	
9	Return Earned (per cent)	13.4%	5.0%	11.0%	9.9%	10.5%	5.8%	10.5%	5.3%	5.3%	6.0%	4.6%	3.6%	2.8%	
<u>Depreciation</u>															
10	Gross Electric Plant	\$68,557	\$83,556	\$84,448	\$ 98,648	\$227,604	\$258,159	\$27,453	\$57,835	\$71,979	\$271,856	\$116,851	\$391,383	\$199,067	
11	Depreciation Reserve	19,314	26,698	38,649	23,469	49,911	28,435	6,365	18,933	20,995	79,341	23,112	116,687	38,549	
12	Ratio - Reserve to Gross Plant	28.2%	32.0%	45.8%	23.8%	21.9%	11.0%	23.2%	32.7%	29.2%	29.2%	19.8%	29.8%	19.4%	
13	Depreciation and Amortization	\$ 2,265	\$ 2,337	\$ 3,384	\$ 3,787	\$ 5,560	\$ 4,452	\$ 834	\$ 1,692	\$ 2,259	\$ 4,585	\$ 3,097	\$ 8,685	\$ 3,060	
14	Ratio - Provision to Gross Plant	3.3%	2.8%	4.0%	3.8%	2.4%	1.7%	3.0%	2.9%	3.1%	1.7%	2.7%	2.2%	1.5%	
<u>Debt Coverage</u>															
15	Net Income	\$ 5,420	\$ 3,073	\$ 5,919	\$ 6,560	\$ 19,478	\$ 11,922	\$ 2,103	\$ 2,189	\$ 2,479	\$ 3,837	\$ 3,225	\$ 8,665	\$ 3,029	
16	Depreciation & Amortization	2,266	2,337	3,384	3,787	5,560	4,452	834	1,692	2,259	4,585	3,097	8,685	3,060	
17	Taxes and Tax Equivalents	1,883	656	1,252	249	2,190	242	725	2,098	1,420	1,017	3,361	4,467	2,464	
18	Interest on Long Term Debt	1,224	408	71	2,110	1,617	5,546	112	-	274	4,624	1,424	4,700	4,493	
19	Total Income Before Tax, Depreciation & Interest	\$10,793	\$ 6,474	\$10,626	\$12,706	\$ 28,845	\$ 22,162	\$ 3,774	\$ 5,979	\$ 6,432	\$14,063	\$ 11,107	\$ 26,517	\$ 13,046	
20	Times Debt Interest Earned	8.8	15.9	149.0	6.0	17.8	4.0	33.7	-	23.5	3.0	7.8	5.6	2.9	



CITY OF EDMONTON

Financial Data and Ratios  
Edmonton and Certain U.S. Municipal Electric Utilities  
Year 1966

(000's Omitted from Dollar Amounts)

Item (1)	TVA Area												BPA Area	
	Edmonton (1967) (2)	Kansas City, Kan. (3)	Lansing, Mich. (4)	Orlando, Fla. (5)	San Antonio, Texas (6)	Sacramento, Calif. (7)	Huntsville, Ala. (8)	Chattanooga, Tenn. (9)	Knoxville, Tenn. (10)	Memphis, Tenn. (11)	Nashville, Tenn. (12)	Seattle, Wash. (13)	Tacoma, Wash. (14)	
Operating Ratio														
Gross Operating Revenues	\$17,347	\$13,944	\$18,515	\$19,394	\$41,980	\$33,596	\$10,878	\$24,705	\$19,807	\$39,199	\$34,344	\$46,216	\$19,729	
Operating Expenses, Incl. Depr. and Taxes	10,716	11,080	12,596	11,913	23,459	20,171	8,664	22,638	17,104	34,464	30,027	36,388	15,288	
Ratio - Operating Expenses to Gross Revenues	61.8%	79.5%	68.0%	61.4%	55.9%	60.0%	79.6%	91.6%	86.4%	87.9%	87.4%	78.7%	77.5%	
Revenue to Plant														
Ratio - Gross Revenues to Net Elec. Plant	35.0%	24.5%	40.4%	25.8%	23.6%	14.6%	51.6%	63.5%	38.8%	20.4%	36.6%	16.8%	12.3%	
Taxes and Contributions to Governmental Units														
Charges to Operating Exp. Services, Distributions, Etc.	\$1,883	\$656	\$1,252	\$249	\$2,190	\$242	\$725	\$2,098	\$1,420	\$1,017	\$3,361	\$4,467	\$2,464	
Total	5,203 \$7,086	652 \$1,308	- \$1,252	3,981 \$4,230	5,556 \$7,746	107 \$349	- \$725	(30) \$2,068	- \$1,420	- \$1,017	(17) \$3,344	1,528 \$5,995	3 \$2,467	
Ratio - Total to Gross Revenue	40.8%	9.4%	6.8%	21.8%	18.4%	1.0%	6.7%	8.4%	7.2%	2.6%	9.7%	13.0%	12.5%	
Ratio - Total to Net Plant	14.3%	2.3%	2.7%	5.6%	4.4%	0.2%	3.4%	5.3%	2.8%	.5%	3.6%	2.2%	1.5%	

Source of Data for U.S. Utilities:  
"Statistics of Publicly Owned Electric  
Utilities in the United States, 1966"  
(Published by Federal Power Commission)





## CITY OF EDMONTON

Data Re Sales and Power Supply  
Edmonton and Certain U.S. Municipal Electric Utilities  
Year 1966

SCHEDULE C  
Sheet 1 of 3

Explanation (1)	TVA Area										BPA Area		
	Edmonton (1967) (2)	Kansas City, Kan. (3)	Lansing, Mich. (4)	Orlando, Fla. (5)	San Antonio, Texas (6)	Sacramento, Calif. (7)	Huntsville, Ala. (8)	Chattanooga, Tenn. (9)	Knoxville, Tenn. (10)	Memphis, Tenn. (11)	Nashville, Tenn. (12)	Seattle, Wash. (13)	Tacoma, Wash. (14)
<b>Electric Operating Revenues</b>													
<b>Residential</b>													
Annual Revenues	\$ 5,765,034	\$ 2,921,934	\$ 4,768,309	\$ 8,247,046	\$ 18,243,861	\$ 15,322,577	\$ 5,917,251	\$ 11,146,018	\$ 10,667,487	\$ 14,770,956	\$ 17,811,273	\$ 21,311,750	\$ 6,850,221
Annual Sales - Kwh (thousands)	361,719	137,750	250,480	374,513	867,523	1,021,223	715,065	1,362,987	1,231,503	1,325,101	2,085,517	2,359,760	725,833
Number of Customers	88,462	37,998	48,875	45,633	182,937	175,433	49,610	81,817	77,523	186,838	130,365	224,860	61,636
Average Revenue per Kwh	1.59¢	2.12¢	1.90¢	2.20¢	2.10¢	1.50¢	0.83¢	0.82¢	0.87¢	1.11¢	0.85¢	0.90¢	0.94¢
Average Revenue per Customer	65 \$	77 \$	98 \$	181 \$	100 \$	87 \$	119 \$	136 \$	138 \$	79 \$	137 \$	95 \$	111
Average Kwh per Customer	4,089	3,625	5,125	8,207	4,742	5,821	14,414	16,658	15,886	7,092	15,998	10,494	11,776
<b>Commercial</b>													
Annual Revenues	\$ 7,045,768	\$ 3,594,368	\$ 6,088,710	\$ 4,443,498	\$ 10,131,839	\$ 13,417,761	\$ 1,577,128	\$ 2,641,322	\$ 2,844,311	\$ 12,575,634	\$ 4,662,430	\$ 13,958,087	\$ 2,774,409
Annual Sales - Kwh (thousands)	442,647	218,609	286,933	147,154	477,137	1,045,890	137,750	217,515	223,042	1,317,331	375,041	1,236,165	250,097
Number of Customers	12,755	4,686	6,269	6,694	21,717	23,404	5,849	8,360	8,567	23,578	14,093	24,645	6,107
Average Revenue per Kwh	1.59¢	1.64¢	2.12¢	3.02¢	2.12¢	1.28¢	1.14¢	1.21¢	1.28¢	0.95¢	1.24¢	1.13¢	1.11¢
Average Revenue per Customer	552 \$	767 \$	971 \$	664 \$	467 \$	573 \$	270 \$	316 \$	332 \$	533 \$	331 \$	566 \$	454
Average Kwh per Customer	34,704	46,652	45,770	21,983	21,971	44,689	23,551	26,019	26,035	55,871	26,612	50,159	40,953
<b>Industrial</b>													
Annual Revenues	\$ 2,627,856	\$ 6,733,325	\$ 6,449,347	\$ 4,621,834	\$ 8,504,773	\$ 4,491,440	\$ 2,951,942	\$ 9,964,792	\$ 5,294,437	\$ 9,320,149	\$ 10,170,197	\$ 7,049,389	\$ 8,161,401
Annual Sales - Kwh (thousands)	301,589	661,602	581,130	311,957	849,412	618,000	477,746	1,723,061	817,789	1,871,384	1,564,051	1,405,131	1,826,759
Number of Customers	133	216	61	402	763	36	393	798	600	379	1,153	287	1,680
Average Revenue per Kwh	0.87¢	1.02¢	1.11¢	1.48¢	1.00¢	0.73¢	0.62¢	0.58¢	0.65¢	0.50¢	0.65¢	0.50¢	0.45¢
Average Revenue per Customer	19,758 \$	31,173 \$	105,727 \$	11,497 \$	11,146 \$	124,762 \$	7,511 \$	12,487 \$	8,824 \$	24,591 \$	8,821 \$	24,562 \$	4,858
Average Kwh per Customer	2,267,586	3,062,972	9,526,721	776,012	1,113,253	17,166,667	1,215,639	2,159,224	1,362,982	4,937,689	1,356,506	4,895,927	1,087,357



## CITY OF EDMONTON

SCHEDULE C  
Sheet 2 of 3Data Re Sales and Power Supply  
Edmonton and Certain U.S. Municipal Electric Utilities  
Year 1966

Explanation (1)	Edmonton (1967) (2)	Kansas City, Kan. (3)	Lansing, Mich. (4)	Orlando, Fla. (5)	San Antonio, Texas (6)	Sacramento, Calif. (7)	Huntsville, Ala. (8)	Chattanooga, Tenn. (9)	Knoxville, Tenn. (10)	Memphis, Tenn. (11)	Nashville, Tenn. (12)	Seattle, Wash. (13)	Tacoma, Wash. (14)
Electric Operating Revenues													
Other Ultimate Consumers													
Annual Revenues	\$ 996,207	\$ 412,623	\$ 255,901	\$ 500,332	\$ 3,924,673	\$ 297,103	\$ 194,324	\$ 569,612	\$ 594,740	\$ 1,736,288	\$ 1,033,008	\$ 3,470,458	\$ 129,346
Annual Sales - Kwh (thousands)	75,282	41,852	16,800	22,804	412,402	18,815	11,993	21,502	24,744	103,244	56,919	420,922	21,399
Number of Customers	3	238	8	9,787	32	184	25	232	49	3	73	1,368	117
Average Revenue per Kwh	1.32¢	0.99¢	1.52¢	2.19¢	0.95¢	1.58¢	1.62¢	2.65¢	2.40¢	1.68¢	1.81¢	0.82¢	0.60¢
Average Revenue per Customer	\$ 332,069	\$ 1,734	\$ 31,988	\$ 51	\$ 122,646	\$ 1,615	\$ 7,773	\$ 2,455	\$ 12,138	\$ 578,763	\$ 14,151	\$ 2,537	\$ 1,106
Average Kwh per Customer	25,094,000	175,849	2,100,000	2,330	12,887,563	102,255	479,720	92,681	504,979	34,414,667	779,712	307,692	182,897
For Resale													
Annual Revenues	\$ 641,990	\$ 171,279		\$ 1,514,734**	\$ 713,592	\$ 19,096							\$ 1,606,714
Annual Sales - Kwh (thousands)	180,470	24,331		145,980	54,497	2,209							341,402
Number of Customers	1	1		2	6	1							26
Average Revenue per Kwh	0.36¢	0.70¢		1.03¢	1.31¢	0.86¢							0.47¢
Average Revenue per Customer	\$ 641,990	\$ 171,279		\$ 757,367	\$ 118,932	\$ 19,096						\$	61,797
Average Kwh per Customer	180,470,000	24,331,000		72,990,000	9,082,833	2,209,000							13,130,846
Total Sales Revenue	\$17,076,855	\$13,833,529	\$17,562,267	\$19,327,444	\$41,518,738	\$33,547,977	\$10,640,645	\$24,321,744	\$19,400,975	\$38,403,027	\$33,676,908	\$45,789,684	\$19,522,091
Annual Sales - Kwh (thousands)	1,361,707	1,084,144	1,135,343	1,002,408	2,660,971	2,706,137	1,342,554	3,325,065	2,297,078	4,617,060	4,081,528	5,421,978	3,165,490
Average Revenue per Kwh	1.25¢	1.28¢	1.55¢	1.93¢	1.56¢	1.24¢	0.79¢	0.73¢	0.84¢	0.83¢	0.83¢	0.84¢	0.62¢
Annual Sales - Kwh (thousands)	1,361,707	1,084,144	1,135,343	1,002,408	2,660,971	2,706,137	1,342,554	3,325,065	2,297,078	4,617,060	4,081,528	5,421,978	3,165,490
Annual Generation - Kwh (thousands)	1,545,762	1,147,527	1,165,974	1,070,681	2,811,698	785,400	-	-	-	-	-	2,354,667	1,473,501
Annual Purchases - Kwh (thousands)	-	57	17,958	-	24,009	2,135,910	1,455,922	3,508,448	2,435,290	4,920,487	4,323,667	3,699,478	1,693,940
Purchased Power Cost	\$ -	\$ 328	\$ 165,550	\$ -	\$ 747,155	\$ 9,106,862	\$ 5,956,952	\$14,252,508	\$ 9,920,203	\$19,909,912	\$17,392,036	\$ 8,277,682	\$ 4,301,157
Cost of Purchased Power per Kwh	-	0.58¢	0.92¢	-	3.11¢	0.43¢	0.41¢	0.41¢	0.41¢	0.40¢	0.40¢	0.22¢	0.25¢

\*Represents Net Interchange





## CITY OF EDMONTON

SCHEDULE C  
Sheet 3 of 3Data Re Sales and Power Supply  
Edmonton and Certain U.S. Municipal Electric Utilities  
Year 1966

Line No.	Explanation (1)	Edmonton (1967) (2)	Kansas City, Kan. (3)	Lansing, Mich. (4)	Orlando, Fla. (5)	San Antonio, Texas (6)	Sacramento, Calif. (7)	Huntsville, Ala. (8)	Chattanooga, Tenn. (9)	TVA Area Knoxville, Tenn. (10)	Memphis, Tenn. (11)	Nashville, Tenn. (12)	BPA Area	
													Seattle, Wash. (13)	Tacoma, Wash. (14)
39	Generator Capacity													
40	Steam	392,000 1/	347,380	302,500	423,300 2/	981,219 3/	-	-	-	-	816,000 5/	-	51,000	59,000
41	Hydro	-	-	1,200	-	600 4/	261,250	-	-	-	-	-	641,656	359,500
42	Internal Combustion	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Capacity	392,000	347,380	303,700	423,300	981,819	261,250	-	-	-	816,000	-	692,656	418,500

1/ As stated in 1967 Annual Report of Alberta Power Commission, including gas turbines.

2/ Includes 25,300 Kw Gas Turbine Unit.

3/ Includes 60,000 Kw Leased to Lower Colorado River Authority.

4/ Leased to Lower Colorado River Authority.

5/ Leased to TVA 1/1/65.

Source of Data for U.S. Utilities:

"Statistics of Publicly Owned Electric  
Utilities in the United States, 1966"  
(Published by Federal Power Commission)



CITY OF EDMONTON

Rate Comparisons  
Alberta Electric Utilities  
Domestic Rates

Line No.	Utility	Rate Schedule	Minimum Bill		100 Kwh	250 Kwh	500 Kwh	750 Kwh	1000 Kwh
			Amount	Kwh Inc.					
1	City of Edmonton	Domestic	\$1.50	25	\$3.00	\$4.50	\$7.00	\$9.50	\$12.00
2	City of Calgary	CES10	1.77	--	2.56	4.70	7.45	10.20	12.95
3	"	CES12	.85	--	5.00	12.50	23.00	30.00	35.00
4	City of Red Deer	1.1	4.40	50	5.80	10.00	13.80	16.80	19.80
5	Calgary Power	1-010	5.00	20	6.60	9.60	13.85	17.47	20.60
6	"	1-030	4.00	20	5.60	8.60	12.10	15.23	18.35
7	"	1-090	3.00	20	4.20	6.45	9.70	12.83	15.95
8	"	1-100	2.60	20	3.80	6.05	9.30	12.43	15.55
9	"	1-110	2.30	20	3.50	5.75	9.00	12.13	15.25
10	"	1-120	2.00	20	3.20	5.45	8.70	11.83	14.95
11	"	1-130	1.50	20	2.50	4.38	7.50	10.63	13.75
12	"	1-160	2.00	60	2.80	4.80	7.30	9.80	12.30
13	"	1-070	3.00	20	4.60	7.60	12.10	15.85	19.60
14	"	1-080	3.00	20	4.60	7.35	11.10	14.85	18.60
15	"	1-820	3.00	40	4.86	9.01	14.26	18.61	22.36
16	Canadian Utilities	101	2.40	40	3.90	7.30	11.80	15.85	19.60
17	"	102	2.60	40	4.22	7.87	12.62	16.77	20.52
18	"	103	2.80	40	4.54	8.44	13.44	17.69	21.44
19	"	104	3.00	40	4.86	9.01	14.26	18.61	22.36
20	Northland Utilities	101	2.40	40	3.90	7.30	11.80	15.85	19.60
21	"	102	2.60	40	4.22	7.87	12.62	16.77	20.52
22	"	103	2.80	40	4.54	8.44	13.44	17.69	21.44
23	"	104	3.00	40	4.86	9.01	14.26	18.61	22.36

CITY OF EDMONTON

Rate Comparisons  
Alberta Electric Utilities  
Domestic Rates

Line No.	Utility	Rate Schedule	Minimum Bill		100 Kwh	250 Kwh	500 Kwh	750 Kwh	1000 Kwh
			Amount	Kwh Inc					
1	City of Edmonton	Domestic	\$1.50	25	\$3.00	\$4.50	\$7.00	\$9.50	\$12.00
2	City of Calgary	CES10	1.77	- -	2.56	4.70	7.45	10.20	12.95
3	"	CES12	.85	- -	5.00	12.50	23.00	30.00	35.00
4	City of Red Deer	1.1	4.40	50	5.80	10.00	13.80	16.80	19.80
5	Calgary Power	1-010	5.00	20	6.60	9.60	13.85	17.47	20.60
6	"	1-030	4.00	20	5.60	8.60	12.10	15.23	18.35
7	"	1-090	3.00	20	4.20	6.45	9.70	12.83	15.95
8	"	1-100	2.60	20	3.80	6.05	9.30	12.43	15.55
9	"	1-110	2.30	20	3.50	5.75	9.00	12.13	15.25
10	"	1-120	2.00	20	3.20	5.45	8.70	11.83	14.95
11	"	1-130	1.50	20	2.50	4.38	7.50	10.63	13.75
12	"	1-160	2.00	60	2.80	4.80	7.30	9.80	12.30
13	"	1-070	3.00	20	4.60	7.60	12.10	15.85	19.60
14	"	1-080	3.00	20	4.60	7.35	11.10	14.85	18.60
15	"	1-820	3.00	40	4.86	9.01	14.26	18.61	22.36
16	Canadian Utilities	101	2.40	40	3.90	7.30	11.80	15.85	19.60
17	"	102	2.60	40	4.22	7.87	12.62	16.77	20.52
18	"	103	2.80	40	4.54	8.44	13.44	17.69	21.44
19	"	104	3.00	40	4.86	9.01	14.26	18.61	22.36
20	Northland Utilities	101	2.40	40	3.90	7.30	11.80	15.85	19.60
21	"	102	2.60	40	4.22	7.87	12.62	16.77	20.52
22	"	103	2.80	40	4.54	8.44	13.44	17.69	21.44
23	"	104	3.00	40	4.86	9.01	14.26	18.61	22.36



CITY OF EDMONTON

Rate Comparisons  
Alberta Electric Utilities  
Domestic Rates

Line No.	Utility	Rate Schedule	Minimum Bill Amount	Kwh Inc.	100 Kwh	250 Kwh	500 Kwh	750 Kwh	1000 Kwh
1	City of Edmonton		\$1.50	25	\$ 3.00	\$ 4.50	\$ 7.00	\$ 9.50	\$12.00
2	City of Calgary Electric System	CES10	1.77	55	2.56	4.70	7.45	10.20	12.95
3		CES12	0.85	17	5.00	12.50	23.00	30.00	35.00
4	City of Red Deer		4.40	50	5.80	10.00	13.80	16.80	19.80
5	Calgary Power Co. (Net)								
6		D1	5.00	20	6.60	9.60	14.10	16.95	20.70
7		D2	4.50	20	6.10	9.10	13.60	16.45	20.20
8		D3	4.00	20	5.60	8.60	13.10	15.95	19.70
9		D4	4.00	20	5.20	7.45	11.20	14.05	17.80
10		D5	3.60	20	4.80	7.05	10.80	13.65	17.40
11		D6	3.00	20	4.60	7.60	12.60	16.40	21.40
12		D7	3.00	20	4.60	7.60	12.10	14.95	18.70
13		D8	3.00	20	4.60	7.35	11.03	13.88	17.63
14		D9	3.00	20	4.20	6.45	10.20	13.05	16.80
15		D10	2.60	20	3.80	6.05	9.80	12.65	16.40
16		D11	2.30	20	3.50	5.75	9.50	12.35	16.10
17		D12	2.00	20	3.20	5.45	9.20	12.05	15.80
		D13	1.50	20	2.50	4.38	7.50	9.88	13.01
18	Canadian Utilities Ltd.								
19		101	2.40	40	3.90	7.30	11.80	15.85	19.60
20		102	2.60	40	4.22	7.87	12.62	16.77	20.52
21		103	2.80	40	4.54	8.44	13.44	17.69	21.44
		104	3.00	40	4.86	9.01	14.26	18.61	22.36
22	Northland Utilities, Ltd.								
23		101	2.40	40	3.90	7.30	11.80	15.85	19.60
24		102	2.60	40	4.22	7.87	12.62	16.77	20.52
25		103	2.80	40	4.54	8.44	13.44	17.69	21.44
		104	3.00	40	4.86	9.01	14.26	18.61	22.36

CITY OF EDMONTON

Rate Comparisons

Alberta Electric Utilities

General Service Electric Power Rate (Commercial)

Line No.	Utility	Billing Demands & Monthly Consumptions				
		3Kw	6Kw	12Kw	30Kw	40Kw
		375 Kwh	750 Kwh	1,500 Kwh	6,000 Kwh	10,000 Kwh
1	City of Edmonton	\$13.00	\$21.75	\$36.75	\$ 97.50	\$134.86
2	City of Calgary Electric System					
	TR - 32	14.38	23.75	40.00	129.00	205.00
	City of Red Deer <sup>1</sup>					
	Calgary Power Co. (Net)					
3	2-010	16.65	33.30	66.25	167.50	242.50
4	2-020	15.86	31.73	61.00	162.25	237.25
5	2-030	14.29	28.57	55.75	157.00	232.00
6	A 2-040	13.73	-	-	-	-
	B 2-710	-	24.16	39.16	101.25	153.25
	Canadian Utilities Ltd.					
7	201	13.38	23.55	47.10	174.00	268.00
8	202	15.73	26.97	53.94	195.60	298.80
9	203	17.08	29.19	58.38	211.20	321.60
10	204	18.43	31.41	62.82	226.80	344.40
	Northland Utilities Ltd.					
11	201	13.38	23.55	47.10	174.00	268.00
12	202	15.73	26.97	53.94	195.60	298.80
13	203	17.08	29.19	58.38	211.20	321.60
14	204	18.43	31.41	62.82	226.80	344.40

<sup>1</sup> No Comparison — See Primary

CITY OF EDMONTON

Rate Comparisons  
Alberta Electric Utilities  
General Service Electric Power Rate (Commercial)

Line No.	Utility	Billing Demands & Monthly Consumptions				
		3 Kw 375 Kwh	6 Kw 750 Kwh	12 Kw 1,500 Kwh	30 Kw 6,000 Kwh	40 Kw 10,000 Kwh
1	City of Edmonton	\$13.00	\$21.75	\$36.75	\$ 97.50	\$126.37
	City of Calgary Electric System					
2	TR-32	14.38	23.75	40.00	120.00	160.00
	City of Red Deer <u>1/</u>					
	Calgary Power Co. (Net)					
3	C-1	12.13	20.75	38.00	123.50	193.50
4	C-2	11.43	20.05	37.30	122.80	192.80
5	C-3	10.73	19.35	36.60	122.10	192.10
6	C-4	10.33	18.95	36.20	121.70	191.70
	Canadian Utilities Ltd.					
7	201	13.38	23.55	47.10	174.00	268.00
8	202	15.73	26.97	53.94	195.60	298.80
9	203	17.08	29.19	58.38	211.20	321.60
10	204	18.43	31.41	62.82	226.80	344.40
	Northland Utilities Ltd.					
11	201	13.38	23.55	47.10	174.00	268.00
12	202	15.73	26.97	53.94	195.60	298.80
13	203	17.08	29.19	58.38	211.20	321.60
14	204	18.43	31.41	62.82	226.80	344.40

1/ No comparison - See Primary





CITY OF EDMONTON

Rate Comparisons  
Alberta Electric Utilities  
Primary Service (Industrial)

Line No.	Utility	Billing Demands (Kilowatts) and Monthly Consumption (Kilowatt Hours)									
		75 Kw	150 Kw	300 Kw	60,000 Kwh	120,000 Kwh	100,000 Kwh	500 Kw	200,000 Kwh	1,000 Kw	400,000 Kwh
1	City of Edmonton	\$191	\$328	\$380	\$ 645	\$ 751	\$1,255	\$1,237	\$2,027	\$2,408	\$3,768
2	City of Calgary Electric System (Existing Cust.) TR-423	255	362	445	649	827	1,221	1,336	1,985	2,608	3,738
3	City of Red Deer	244	420	489	840	977	1,679	1,629	2,799	3,258	5,598
4	Comm. Primary			405	702	810	1,404	1,350	2,340	2,700	4,680
5	Calgary Power Co. (Net)	338	563	675	1,125						
6	RS-100					1,350	1,950	2,250	3,250	4,500	6,500
7	RS-101	300	450	600	900	1,200	1,800	2,000	3,000	4,000	6,000
	RS-102										
	Canadian Utilities Ltd. 1/										
	Northland Utilities, Ltd. 1/										

1/ Not available.



CITY OF EDMONTON

Rate Comparisons  
Municipal Electric Utilities  
Domestic Rates

Line No.	Utility (1)	<u>Minimum Bill</u>		100 Kwh (4)	250 Kwh (5)	500 Kwh (6)	750 Kwh (7)	1000 Kwh (8)
		<u>Amount</u> (2)	<u>Kwh Inc.</u> (3)					
1	City of Edmonton	\$1.50	25	\$3.00	\$4.50	\$7.00	\$9.50	\$12.00
2	Kansas City, Kan.	0.75	12	2.80	4.95	7.20	10.35	14.10
3	Lansing, Mich.	0.50	14	3.00	6.13	8.63	11.50	14.63
4	Orlando, Fla.	1.00	16	4.63	8.38	12.13	15.88	19.63
	San Antonio,							
5	Texas	0.50	10	3.59	6.21	10.09	13.84	17.59
6	Sacramento, Calif.	1.10	15	3.24	5.29	7.74	9.69	11.44
	<u>TVA Area</u>							
7	Huntsville, Ala.	0.75	30	2.25	4.13	6.03	7.03	8.03
8	Chattanooga, Tenn.	0.75	30	2.25	4.13	6.03	7.03	8.03
9	Knoxville, Tenn.	0.75	25	2.50	5.00	6.90	7.90	8.90
10	Memphis, Tenn.	0.75	25	2.50	5.00	6.90	7.90	8.90
11	Nashville, Tenn.	0.75	25	2.50	5.00	6.90	7.90	8.90
	<u>BPA Area</u>							
12	Seattle, Wash.	0.75	25	2.52	4.40	5.00	6.58	8.33
13	Tacoma, Wash.	1.20	30	1.95	3.55	5.91	7.46	9.01

Source: Federal Power Commission - Typical Electric Bills





CITY OF EDMONTON

Rate Comparisons  
Municipal Electric Utilities  
Commercial - General Services Rates

Line No.	Utility (1)	Type of Service 1/ (2)	Billing Demands & Monthly Consumption				
			3 Kw 375 Kwh (3)	6 Kw 750 Kwh (4)	12 Kw 1,500 Kwh (5)	30 Kw 6,000 Kwh (6)	40 Kw 10,000 Kwh (7)
1	City of Edmonton	Gen.	\$13.00	\$21.75	\$36.75	\$ 97.50	\$126.37
	Kansas City, Kan.						
2	- CL1	L	13.80	27.60			
3	- CL3	L			45.00		
4	- CL2	L				133.50	
5	- SP1	P	11.48	22.95			
6	- SP2	P			45.90	148.50	
7	- BP1	P				148.44	218.44
8	Lansing, Mich.	Gen.	13.95	25.20	43.20	144.45	234.45
9	Orlando, Fla.						
10	- B1	Gen.	17.28	30.78	55.28	183.78	263.78
11	- E1	Gen.				160.00	240.00
12	San Antonio, Texas	Gen.	12.65	22.05	42.46	128.35	184.43
13	Sacramento, Calif.	Gen.	9.20	15.95	27.95	82.95	135.45
	<u>TVA Area</u>						
14	Huntsville, Ala.	Gen.	7.63	12.25	21.45	70.50	109.00
15	Chattanooga, Tenn.	Gen.	8.50	13.50	21.00	66.00	110.00
16	Knoxville, Tenn.	Gen.	9.00	14.00	23.50	78.00	120.00
17	Memphis, Tenn.	Gen.	9.00	14.00	23.50	78.00	120.00
18	Nashville, Tenn.	Gen.	9.00	14.00	23.50	78.00	120.00
	<u>BPA Area</u>						
19	Seattle, Wash.	Gen.	6.01	11.26	21.76	81.76	130.76
20	Tacoma, Wash.						
21	- B	L	6.94	10.88	18.75	66.00	
22	- E1	P	5.78	11.57	23.13	70.20	104.60

1/ Letters in this column used to indicate "Type of Service" are:  
L - Lighting, other uses and single phase or incidental power;  
Gen - All purposes including 3-phase power;  
P - Motive power only (including heating but no lighting).

Source: Federal Power Commission - Typical Electric Bills



Rate Comparisons  
Municipal Electric Utilities  
Industrial Rates

Line No.	Utility	Type of Service	Billing Demands (Kilowatts) and Monthly Consumption (Kilowatt Hours)											
			75 Kw			150 Kw			300 Kw			500 Kw		
			15,000 Kwh	30,000 Kwh	30,000 Kwh	30,000 Kwh	60,000 Kwh	60,000 Kwh	60,000 Kwh	120,000 Kwh	100,000 Kwh	200,000 Kwh	200,000 Kwh	400,000 Kwh
1	City of Edmonton		\$191	\$328	\$380	\$	645	\$	751	\$1,255	\$1,237	\$2,027	\$2,408	\$3,768
2	Kansas City, Kan.													
3	- IP3	M	308	451										
4	- IP5	M			546		812		1,072	1,603	1,735	2,620	3,236	5,004
5	- IP9	M											3,164	4,802
6	Lansing, Mich.													
7	- 4	MUL	458	660	735	1,101	1,350	2,011	2,181	3,052	3,924	4,257	5,651	5,984
8	- 5	MUL			735	998	1,350	1,868	2,181	3,045	3,924	4,257	5,651	5,984
9	Orlando, Fla.	MUL	363	575	650	1,000	1,150	1,750	1,750	2,750	3,250	3,250	4,875	4,875
10	San Antonio, Texas	MUL	285	381	455	647	794	1,178	1,246	1,886	2,376	2,376	3,656	3,656
11	Sacramento, Calif.	MUL	224	344	438	608	795	1,095	1,211	1,671	2,280	2,280	3,153	3,153
	TVA Area													
12	Huntsville, Ala.	MUL	174	249	320	450	600	820	960	1,260	1,760	1,760	2,360	2,360
13	Chattanooga, Tenn.	MUL	190	280	355	495	645	865	1,005	1,305	1,805	1,805	2,405	2,405
14	Knoxville, Tenn.	MUL	195	285	360	500	650	870	1,010	1,310	1,810	1,810	2,410	2,410
15	Memphis, Tenn.	MUL	195	285	360	500	650	870	1,010	1,310	1,810	1,810	2,410	2,410
16	Nashville, Tenn.	MUL	195	285	360	500	650	870	1,010	1,310	1,810	1,810	2,410	2,410
	BPA Area													
17	Seattle, Wash.													
18	- 55	M	172	238	305	437								
19	- 61	MRL					572	836	928	1,348	1,798	1,798	2,598	2,598
20	- 62	MRL											2,500	2,500
21	Tacoma, Wash.	MRL	166	240	277	380	466	658	709	1,029	1,317	1,317	1,957	1,957

1/ Letters in this column used to indicate "Type of Service" are:  
M - Unrestricted motive power;  
MRL - Unrestricted motive power and restricted lighting;  
MUL - Unrestricted lighting in addition to unrestricted motive power.

Source: Federal Power Commission - Typical Electric Bills







*ANSWERS TO QUESTIONS POSED*



1. “The application of regulatory legislation and procedures, the purposes, powers and duties of the respective regulatory bodies and the co-ordination of their functions.”

\* \* \* \* \*

This question must, of necessity, be answered by reference to general categories rather than exhaustive detail. On an overall basis, it may be stated that it would be in the public interest if the various regulatory bodies were co-ordinated so as to avoid overlapping and/or conflict in their functions and operations. The centralization of power may not be necessary, and in fact be inadvisable if such centralization is based upon administrative need rather than upon functional requirements. That is, to have one central body regulate all matters connected with power may prove faulty if the particular central body is not as well skilled as another in handling such matters.

At present there are 4 main regulatory bodies in respect of power — 3 explicitly by statute: The Public Utilities Board, the Local Authorities Board and the Alberta Power Commission — and one de facto: the municipal councils directly responsible to their respective electorates. The general pattern of past legislation has recognized the ability and sense of duty possessed by municipal councils as regulators by exempting municipally owned and operated public utility systems from most external regulations. It is submitted and strongly urged that this attitude should be continued — the municipal power utility systems have functioned extremely well and have made significant contributions to their municipalities without requiring outside regulation.

## 1. THE PUBLIC UTILITIES BOARD

A municipality that has not come voluntarily under the jurisdiction of the Public Utilities Board by S.70 (2) and S.102 does not by S.2 (1) come within the definition of an “owner of a public utility”. (The Public Utilities Board Act, S. A. 1960, C. 85) S. 102b gives the Board jurisdiction over a “proprietor municipality” which is one that owns or operates a power utility and allows the Board, upon application of another municipality, to direct the supply of power to the

other municipality by the proprietor municipality. S.62 of the proposed Act would repeal S.102b re power with the notation that the Power Commission would have similar powers under the draft act. It should be noted that the protection afforded the proprietor municipality under S.102b(5) in that S 102b would not apply to the operation and management of a public utility of a proprietor municipality in so far as they relate to the affairs and business of the public utility within the corporate limits from time to time of the proprietor municipality. ” Note that the concept of the expansion of utility boundaries to be coincident with municipal corporate boundaries is recognized in the Public Utilities Board Act.

The Public Utilities Board is required to give approval to any privilege or franchise granted to any owner of a public utility by any municipality within Alberta (S. 94-96). S.269-271 of the Municipal Government Act, S. A. 1968, C. 68, provides the framework for the approval of the Board of any special franchise or contract to supply the citizens of the municipality or the municipality directly, either originally or at renewal. Now to this procedure of approval by both the municipal council and the Public Utilities Board, it is proposed to add the jurisdiction of the Power Commission as to the setting of designated service areas by S.35 of the draft Act. It is submitted that this jurisdiction is not necessary either in the case where the municipality supplies power within its own corporate boundaries or where a private utility supplies the municipality. The guidelines imposed on the Public Utilities Board should provide sufficient supervision to the situation: S. 94 (2) requires the Board to determine “that the privilege or franchise is necessary and proper for the public convenience and properly conserves the public interests” and S.96 (c) requires the Board to be “satisfied that having regard to the availability of any other source of supply in the area in which the municipality is situate and to any other circumstances, the granting of the franchise or privilege is to the general benefit of the area directly or indirectly affected thereby.”

S.97 gives the Public Utilities Board authority to grant orders approving the supply of power to rural areas and it charges the Board with the giving of consideration to the need for the extension of power to rural areas throughout Alberta. (See also S. 18 of the present Power Commission Act, R. S. A. 1955, C. 239, which gives the Board jurisdiction over power extensions into



unserved areas). This section is proposed to be replaced by S.35 of the draft Act. It is submitted that S.35 is considerably more than a replacement of this “permissive order” section as it would allow the Power Commission to designate all areas of power supply - be they rural or urban. This would appear to be a most backward step as it strongly implies that urban municipalities are less capable of determining their power requirements and of dealing with the power suppliers (including the municipalities themselves) than they were previously.

S.71 and S.81 allow the Public Utilities Board to enquire into and fix the rates of the non-municipal power utilities. S.280 of The Municipal Government Act recognizes the general self-discipline of the municipalities and allows the Board to enquire into municipal rates in the limited instances of determining if the service charge (a) does not conform to the rate structure established by the municipality, (b) has been improperly imposed or (c) is discriminatory, and to adjust accordingly, S.276 of The Municipal Government Act also allows the Board to arbitrate, on consent, the question of rates where one municipality is supplying another with power.

## **2. THE LOCAL AUTHORITIES BOARD**

S.70 of the Local Authorities Board Act, S.A. 1961, c.46, and S.311 of The Municipal Government Act give this Board the watchdog authority over borrowing for power utility purposes by the municipality and thereby reinforce the soundness of the municipal utility financing.

S.20 of The Municipal Government Act gives this Board jurisdiction over annexations or amalgamations in respect of municipalities. S.21 of this Act together with S.271 (4) ensure the sanctity of contract and rights as to the preservation of existing contracts and rights held by a municipality or person in the area annexed for the “natural life” of such contract or right. It must be taken however that supply rights to a rural area under S.97 of the Public Utilities Board Act can only have a maximum life of 20 years when the rural area becomes in law and in fact an urban area upon annexation. To take any other view would be totally inconsistent with the philosophy of the granting of special franchises by urban municipalities which have far more resources available

to them in the negotiation of a special franchise so as to protect the interests of their citizens as compared with rural areas. It must also be recognized that, in practice, the population and economic composition of the particular area annexed will have radically changed from that present at the time of the permissive order.

### 3. PRESENT POWER COMMISSION

S.7 of the Power Commission Act, R. S. A. 1955, C. 239 gives the Power Commission jurisdiction over the construction and extension of a power utility by a “proprietor”. “Proprietor” is defined as “corporation, firm, person or association of persons” and it would appear ambiguous as to whether or not this definition included a municipality. It is submitted that, in law, it does not; S.9 (1) (n) refers to “person or municipality” and S.19 refers to “municipality or corporation”. In keeping with the general theory of non-regulation of municipalities by outside bodies, such provision would not appear to apply. In fact, the City of Edmonton has submitted the most general of plans to the Power Commission. It would therefore not appear that significant use is being made of this particular provision in respect of “plans and specifications”.

S.9 would appear to give the Commission great powers but these do not seem to have been exercised at all to engage the Commission in the field of power supply. It is interesting to note that S.16 of the proposed act (corresponding to the present S.9), although appearing to be of general application is severely cut down by S.17 (2) in respect of Calgary Power Ltd. being a Dominion water power licensee and a party to the Brazeau River Development Agreement. Therefore it would appear that the Power Commission would, in effect, gain control over the municipal systems and lose control over the largest power utility by the enactment of the proposed Act.

Although the proposed Act purports to transfer the “permissive order” section to S.35 from S.97 of The Public Utilities Board Act, it is submitted that the proposed Act would not give the Power Commission jurisdiction over previously granted permissive orders (which are badly in need of review and regularization).

#### 4. THE MUNICIPALITIES

Our democratic system of government places great and well-justified faith in the elected representatives of the people who provide general stewardship for and accept responsibility for municipal government activities. The continual review of the electoral process and the day-to-day contact with and scrutiny of the municipal officials has and will continue to serve the citizens admirably. Control and regulation over rates, capital investment and expansion should continue to be with the municipal council, responsible to the electorate, in respect of the operation of the municipal power utility within the corporate boundaries as they may be from time to time.





2. “Should uniform legislation apply to all utility owners with respect to...
- (a) A uniform system of accounts?”

\* \* \* \* \*

Before considering the question of uniformity in this area, it may be advisable to refer briefly to the “legislation” which presently exists.

Dealing firstly with municipalities, Section 90 of the Public Utilities Board Act provides that every municipality operating a public utility shall keep the accounts thereof in the manner prescribed by the Board for the accounting by the owners of similar public utilities and shall file with the Board such statements thereof as may be directed by the Board. This Section does not, however, apply to a municipality unless the municipality’s public utility has been brought under the Act by a by-law as provided for in Section 70(2) and such by-law has been approved by the Lieutenant-Governor-in-Council under Section 102.

The Municipal Government Act contains little in the way of provisions dealing with accounting other than certain general provisions dealing with sinking funds in respect of debentures which do not appear to be material.

The Local Authorities Board Act contains provisions dealing with municipal accounts. One of these is Section 100(1) under which the Board may make regulations as to the accounts to be kept by local authorities and the methods of keeping the same. It does not appear that any regulations have been promulgated under that section.

With respect to private utilities, Section 80(c) of the Public Utilities Board Act provides that an owner of a public utility shall, with respect to the public utility, keep his books, records and accounts so as to afford an intelligent understanding of the conduct of his business and accord with such uniform system of accounting as the Board may prescribe by regulations. It does not appear that any regulations have been promulgated under that section. It should be noted,

however, that the part of the Public Utilities Board Act in which the aforesaid section appears applies to an owner of a public utility to which the Water Resources Act, R.S.A. 1955, C. 362, is applicable.

There are, in fact, Regulations with respect to accounting which apply to owners to whom the Water Resources Act is applicable. Section 60 of the Provincial Water Power Regulations contains detailed provisions respecting accounting and Section 79 of the Dominion Water Power Regulations also contains similar provisions respecting accounting which do not appear to differ materially with those contained in the Provincial Regulations. There are also, of course, provisions in both the Companies Act of Alberta and the Canada Corporations Act which deal with accounts.

There do not appear to be any provisions of the Income Tax Act which would affect this question.

With respect to municipalities, it appears that most municipalities endeavour to follow the methods of financial reporting recommended in the Municipal Finance Reporting Manual as prepared by the Dominion Bureau of Statistics. As a result there is a substantial degree of uniformity in the system of accounts used by municipalities other than in the areas of provision for depreciation and the treatment of principal repayment on debentures. The said Manual suggests showing as expenditures both provision for depreciation and payments of debenture principal. In this connection, the Manual's comment on depreciation is that "amounts provided as depreciation on utility plant and equipment and other fixed assets, *in addition to* provision for retirement of debentures issued for utility purposes, the latter of which is to be included in item 11 below" should be shown as an expenditure. Item 11 (which recommends showing debt charges as expenditures) respecting debt charges refers to "the gross amounts provided for interest, principal instalments and sinking fund requirements in respect of all debentures issued for utility purposes.....". None of the municipalities whose statements were examined follow the procedures suggested above and each of such municipalities appears to treat differently the matters of provision for depreciation and repayment of debenture principal. Associated with such treatment is the

method of accounting for the purchase of capital assets out of funds other than those created by the issue and sale of debentures. It may be of assistance to comment briefly upon some of the different methods and treatments employed.

*City of Edmonton* - The City of Edmonton charges payments of debenture principal as an expense but does not charge as an expense any provision for depreciation on assets acquired through debenture borrowing. The City does charge as an expense provision for depreciation on assets acquired with funds other than debenture funds and the expense so charged is set aside in a reserve for plant extensions out of which assets are purchased from time to time.

*City of Calgary* - The City of Calgary appears to follow most closely the methods employed by private utilities in such matters. Payments of debenture principal are not charged as an expense, but rather as an appropriation of net earnings. The City appears to charge as an expense, provision for depreciation on all assets and the funds produced thereby are used from time to time for plant extensions.

*City of Red Deer* - The City of Red Deer shows payments of debenture principal as an expense but does not show as an expense any provision for depreciation. Assets other than those acquired through the use of debenture funds are charged as an expense as acquired. Accumulated depreciation reserves are shown as a deduction from assets and the annual depreciation charge is shown as a deduction from investment in capital assets.

*City of Lethbridge* - The City of Lethbridge follows methods substantially similar to those employed by the City of Red Deer except that accumulated depreciation shown as a deduction from assets includes only the repayment of debenture principal.

It will be noted that all of the above cities *in effect* charge principal repayments on debentures as an expense but that there is no uniformity in the area of charging as an expense, provision for depreciation and the setting aside thereof in reserve funds. The differences in treatment presumably reflects different policy considerations and approaches in the cities concerned.



It appears that the only advantage to enforcing uniformity upon municipalities in these areas would be for statistical purposes. It will also be noted that none of the cities follow the procedure suggested in the Manual whereby both provision for depreciation and repayment of debenture principal would be charged as expenses.

With respect to private utilities, there appears to be a substantial degree of uniformity at the present time. In the case of private utilities, of course, repayment of debenture principal is not shown as an expense, but in all cases provision for depreciation is charged as an expense. The matter of depreciation is of vital concern in the areas of rate base, rate of return and rates. Section 81 of the Public Utilities Board Act deals with the fixing of rates and subsection (3) thereof requires the Board to give due consideration to depreciation, amortization or depletion of utility property. Section 80(e) also requires that an owner of a public utility shall, with respect to the public utility, subject to any order of the Board, maintain proper and adequate depreciation, amortization or depletion accounts on a straight line basis or unit of production method or such basis or method as the Board may direct upon application thereto. Under section 35 of the Provincial Water Power Regulations, the Board is given power to ascertain and determine from time to time and by Order fix the proper and adequate rates of depreciation on the several classes of property used or useful in connection with the undertaking of any licensee, and to require the licensee to set aside out of earnings and place in separately invested depreciation reserves such amounts as will conform to the rates so ascertained, determined and fixed and to specify the purpose for which and the manner in which such reserves and the income arising from the investment thereof are to be expended. Section 49 (3) of the Dominion Regulations is to a similar effect. Depreciation enters significantly into the matters of rate base, rate of return and rates which will be discussed further below and, as indicated above, is under the jurisdiction of the Public Utilities Board whether or not the utility owner in question is subject to the Water Resources Act.

To the degree that the system of accounts plays any determining role in the fixing of rates and particularly in the fixing of comparable rates for both utility owners which are and which



are not subject to the Water Resources Act, uniformity is desirable.

The foregoing discussion is, of course, material to sections 54 and 56 of the proposed Bill. Section 54 (c) provides that the Commission may make regulations prescribing the system of accounting to be used by owners of electric utilities and Section 56 (a) requires every owner of an electric utility to keep its accounts in accordance with such uniform system of accounting as may be prescribed by the Regulations. Great care would have to be taken to avoid possible areas of conflict and confusion with other prescribed methods of accounting. For example, the accounting requirements contained in the Dominion Water Power Regulations (which will be discussed in detail below) and in the Municipal Finance Reporting Manual must be kept in mind.

#### **RECOMMENDATIONS:**

In the interest of public information, The City of Edmonton would find it unobjectionable to conform to substantially the same uniform accounting standards that are required of the privately owned utilities, with the proviso that this conformity would be strictly for informational purposes only and would not prejudice municipalities in their freedom of use of funds. The accounting system adopted, together with all necessary modifications, should be decided upon among the utility owners before being prescribed in the Regulations so as to prevent any conflict, confusion, impossibility or great inconvenience in complying with such standards.



2. “Should uniform legislation apply to all utility owners with respect to . . .
- (b) Procedure and valuation re
  - (i) Acquisition and disposition of property.
  - (ii) Expropriation

\* \* \* \* \*

In order to consider the question of uniformity it appears necessary to first consider the differences which presently exist relating to different utility owners, and then to consider whether or not uniformity is possible or desirable.

The questions will be dealt with under the following headings:

- I. Transactions in the Usual and Ordinary Course of Business
  - A. Acquisition and disposition by
    - (1) Private Utilities
    - (2) Municipal Utilities
    - (3) Power Commission
  - B. Expropriation by
    - (1) Private Utility — (i) Procedure  
(ii) Valuation
    - (2) Municipal Utilities — (i) Procedure  
(ii) Valuation
    - (3) Power Commission — (i) Procedure  
(ii) Valuation
- II. Acquisition and Expropriation from Utility Owners
  - A. From private utility owner not being a water power licensee
    - (1) By municipality on expiration of franchise—
      - (i) Procedure
      - (ii) Valuation
    - (2) By Power Commission — (i) Procedure  
(ii) Valuation

B. From private utility owner which is a water power licensee

(1) By municipality on expiration of franchise —

(i) Procedure

(ii) Valuation

(2) By Power Commission

(3) By Alberta — (i) Procedure

(ii) Valuation

(4) By Canada (i) Procedure

(ii) Valuation

III. Recommendations.

I. TRANSACTIONS IN THE USUAL AND ORDINARY COURSE OF BUSINESS

A. ACQUISITIONS AND DISPOSITIONS

(1) BY PRIVATE UTILITIES

The acquisition and disposition of property by a private utility owner in the usual and ordinary course of its business is not directly controlled by legislation, nor it is submitted, should it be. The power to acquire and dispose of property is inherent in the powers of the utility company subject only to such acquisitions and dispositions being within the usually broad and general objects of the company. There is, however, a degree of what might be termed indirect control by reason of the following legislation:

(a) The Public Utilities Board Act— By Section 81 (2) the Board is empowered and directed, in the fixing of rates, to determine a rate base for the property of the owner that is *used or required to be used* in such owner's service to the public. It is implicit in this section that the Board has the power to determine that any particular property is not used or required to be used in such owner's service, but it is submitted that the Board has traditionally allowed great latitude to utility owners in this area on the ground that it is a function of management. Other sections of that Act such as, 71 (b), 80 (b), 81 (1) (c) and (e), 84, 94 (3), 96, 97 and 119 deal with such matters as improvement



to and standards of service, maintenance of property, construction of extensions and joint use of property. It should be noted that when the Water Resources Act is applicable to an owner of a public utility Part 2 of the Act containing the above noted sections and dealing with utilities shall be applied thereto as being subject to the Water Resources Act and the orders and regulations made thereunder.

(b) Indirect control similar to that exercisable under the Public Utilities Board Act is exercisable by the Minister under both the Dominion and Provincial Water Power Regulations. These Regulations, which will be commented upon in further detail below, provide generally for a rate of return upon the "actual cost" of property and the definition of "actual cost" in Section 1 (c) of the Provincial Regulations and in Section 1 of the Dominion Regulations both refer to "development or works in use and useful for the purposes of the undertaking".

(c) The Power Commission Act: Section 7 (2) requires (subject to the Regulations) the approval of the Commission for the construction, extension, alteration or commencing to operate an electric public utility. By Section 19, no utility owner may without the authorization of the Commission dismantle or remove works. The powers proposed to be given to the Commission by the Bill are much more extensive than those which the Commission is presently entitled to exercise, particularly in the area of control, direct or indirect, over acquisition of property by a utility owner (specifically power plants, extensions and transmission lines).

## **(2) MUNICIPAL UTILITIES**

The powers of acquisition and disposition of property by a municipal utility are conferred by the Municipal Government Act and Part 6 in particular (see Section 273). The comments made with respect to private utilities in the acquisition and disposition of property apply also to municipal utilities except that the Public Utilities Board Act does not apply to a municipality (Section 70 (2)) unless the requisite by-law is passed and approved by the Lieutenant-Governor-in-Council under Section 102. In addition, the acquisition of property by a municipality may, in effect,

be controlled by the ratepayers and/or the Local Authorities Board pursuant to the Municipal Government Act and the Local Authorities Board Act. The broader powers proposed to be given to the Commission under the new Bill mentioned above are equally applicable to municipal utilities and these broader powers at least to the extent to which they apply to municipal utilities are opposed.

### **(3) POWER COMMISSION**

The powers of the Power Commission to acquire and dispose of property are provided for in Section 9 of the Power Commission Act and would be provided for in Section 16 of the proposed Bill.

## **B. EXPROPRIATION BY**

### **(1) PRIVATE UTILITIES**

(i) **PROCEDURE** — The expropriation of property by a private utility owner in the usual and ordinary course of its business is empowered by:

- (a) The Public Utilities Board Act — Sections 73 to 76 as to municipal lands.
- (b) The Water Resources Act — Sections 73 and 84d as to expropriation by a licensee under that Act of private lands.
- (c) The Water, Gas, Electric and Telephone Companies Act Section 28 to 32 as to expropriation by a company outside cities, etc. The procedure for such expropriation is governed by The Expropriation Procedure Act.

(ii) **VALUATION** — The valuation payable is usually determined on the basis of fair market value or on the basis of value to the owner if that concept is applicable in any given case.

### **(2) MUNICIPAL UTILITIES**

(i) **PROCEDURE** — The power of expropriation of property by a municipal utility is conferred by the Municipal Government Act and Part 6 in particular (see Section 284) and the power of expropriation is subject to the Expropriation Procedure Act. Expropriation by a municipality would also in effect be controlled by the ratepayers and/or the Local Authorities Board pursuant

to the Municipal Government Act and the Local Authorities Board Act.

(ii) **VALUATION** – Valuation on expropriation would be determined in the same manner as in case of expropriation by a private utility as outlined above.

### (3) **POWER COMMISSION**

(i) **PROCEDURE** – The expropriation of property by the Power Commission is presently provided for in Section 9 of the Power Commission Act and would be provided for in Section 16 of the proposed Bill. The procedure for expropriation of land is governed by the Expropriation Procedures Act but the expropriation by the Commission of personal property, plant and equipment is not subject to the Expropriation Procedures Act (see Schedule 1 thereto).

(ii) **VALUATION** – The valuation is determined pursuant to Section 9 (4) of the existing Power Commission Act and would be provided for by Section 17 (1) of the proposed Bill. By Section 19 (2) of the Bill, certain sections of the Expropriation Procedures Act would apply in respect of the expropriation of personal property.

## II. **ACQUISITION AND EXPROPRIATION FROM UTILITY OWNER**

### A. **FROM PRIVATE UTILITY OWNER NOT BEING A WATER POWER LICENSEE**

#### (1) **BY MUNICIPALITY ON EXPIRATION OF FRANCHISE**

(i) **PROCEDURE** – By virtue of Section 271 (2) of the Municipal Government Act, any special franchise or contract for the supply of light, power, etc. to the residents in a municipality or to the municipality itself is subject to the condition that if the contract is not renewed upon expiration of its term, the council with the consent of the Public Utilities Board may purchase the system (failing mutual agreement) for such price and upon such terms as may be fixed and settled by the Public Utilities Board. Provisions similar to those contained in the above mentioned section of the Municipal Government Act are generally also included in the franchise agreement.



(ii) **VALUATION** – It is submitted that the question of valuation on purchase by a municipality at the expiration of a franchise has been determined by the Public Utilities Board in *City of Grande Prairie vs. Northland Utilities* in its decision numbered 27014 (file P. U. 187-A). This decision was affirmed by the Appellate Division of the Supreme Court of Alberta reported in 56 WWR 613. In that case the question arose as to whether or not such acquisition by the municipality in effect constituted an “expropriation”, which issue was exceedingly important in determining the basis or method of valuation. At page 4 of its decision, the Board said “The Board is of the opinion that in the instant case whether the city has a contractual right of purchase or a statutory right of purchase or both, it is not a case where it can be considered that the company is being deprived of its assets against its will, but rather an agreement by the company to sell at a price to be ascertained and in that sense does not involve the elements of a compulsory taking.” The Board accordingly held that since it was not a compulsory purchase or expropriation, the utility was not entitled to what were referred to as “severance damages” for elements which may have been material to the concept “value to the owner” if a compulsory taking or expropriation were involved. The Board also held that the municipality had to acquire all and not just part of the property in the municipality of the utility.

The municipality argued that the “value of the property was its original cost less booked depreciation which argument was rejected by the Board. The utility on the other hand argued that the present value of future earnings, should be considered as an element of value, that is, that the market value should be largely determined by potential earning capacity rather than the value of the physical assets only as argued by the municipality. The Board also rejected that concept and settled upon the method of reproduction cost new less observed depreciation.

It is interesting to note that Porter, J. A. dissented upon appeal upon the ground only that the value should have been decided upon the basis of original cost less depreciation and not on the basis of reproduction cost new less observed depreciation because the rates charged to the consumers included depreciation designed to recover the entire capital investment of the utility over the life of the assets in question.



At this time, the above decision appears to be the settled law of the Province and would, it is submitted, apply equally to the acquisition by a municipality pursuant to the Municipal Government Act and/or a franchise agreement of an electrical distribution system, subject to one possible and most important exception, that is, in the case of a utility to which the Water Resources Act is applicable which will be discussed below.

**(2) BY POWER COMMISSION**

**(i) PROCEDURE** — by Section 9 (1) of the Power Commission Act, the Commission with the authorization of the Lieutenant-Governor-in-Council may, with or without the consent of the owner, acquire

- (e) the right to divert or use water,
- (i) lands used or suitable for use as a site for generating stations  
or used or required as a site for power stations, sub-stations  
and all buildings, machinery, plant, etc. thereon,
- (j) Machinery, plant, etc, for the transmission, supply and distribution of power,
- (o) any works and the land occupied or used in connection therewith used  
or intended for distribution of power in a municipality as defined in the Act that  
has entered into an agreement with the Commission for the supply of power and,
- (q) lands necessary for buildings, etc.

As mentioned above, the expropriation by the Commission of land but not personal property, plant or equipment is subject to the Expropriation Procedure Act. In the proposed Bill, Section 16 (1) provides that with the authorization of the Lieutenant-Governor-in-Council, the Commission may acquire, with or without the consent of the owner,

- (g) the right to divert or use water,
- (h) land used or required as a site for any works or buildings, equipment, etc,  
incidental to the operation by the Commission of an electrical utility.

These powers while more generally stated appear at least as broad as those contained in the present Act. The aforementioned powers in the proposed Bill appear clearly to include the right to expropriate from a municipal utility as well as a private utility and the present Act seems also to include such powers. It is not proposed to comment separately upon expropriation by the Power Commission of a municipal utility.

(ii) **VALUATION** – Section 9 (3) of the Act provides that in the case of expropriation compensation shall be made to the owner for the assets expropriated and for all damage necessarily resulting therefrom and by Section 9 (4), in fixing such compensation regard shall be had to the value of the assets expropriated and the compensation shall be based thereon. It should be noted that with respect to the expropriation of land, Section 15 of the Expropriation Procedure Act requires the payment of “due compensation”. Section 17 (1) of the proposed Bill provides that due compensation shall be made to the owner of an asset expropriated having regard to its value and for all damages necessarily resulting therefrom. By Section 19 (2) certain sections of the Expropriation Procedure Act apply to the expropriation of personal property. Both the present Act and the proposed Bill refer merely to “value” which, it is submitted, is most unsatisfactory. Presumably “value” refers to fair market value and by virtue of expropriation, the concept of “value” to the owner would appear to be introduced. It could be argued, however, that value should be book value or reproduction cost new less observed depreciation or trended original cost less observed depreciation or some other concept of value which may be applicable in any given case.

While the Commission’s powers of expropriation seem clear except with respect to a utility subject to the Water Resources Act, which will be commented upon below the necessity for and the desirability of such powers at least insofar as the same apply with respect to municipalities is questioned.

## **B. FROM PRIVATE UTILITY OWNER WHICH IS A WATER POWER LICENSEE**

The matter of acquisition and expropriation from a utility owner which is a water power licensee is most complex and appears to require consideration of statutes and regulations which seem to be relevant thereto:

- (a) Statutes of Canada 1929, chapter 61, respecting water powers in, inter alia, Alberta authorized the Dominion to enter into agreements with the Province for the transfer, with certain exceptions, of the administration of ungranted water powers which were the property of Canada and under the control and management of the Government of Canada.
- (b) Statutes of Canada 1931, chapter 3, being the Alberta Natural Resources Act approved an agreement between Alberta and Canada dated December 14, 1929, which is contained in the schedule to the Act. By Section 1 the transfer of lands, etc. was subject to any interest other than that of the Crown and to the provisions of any Act of Canada until Alberta otherwise provided. By Section 2, Alberta was to carry out any arrangement whereby any person had become entitled to any interest in any land, etc. and was not to affect or alter any term of such arrangement by legislation or otherwise, except either with the consent of all parties thereto other than Canada or insofar as any legislation might apply generally to all similar agreements relating to lands, etc. in the Province irrespective of who may be parties thereto.
- (c) Statutes of Canada 1938, chapter 36, amended the above-mentioned agreement by a further agreement under which Section 1 of the first-mentioned agreement was amended to include in the transfer of 1929 waters and water powers.
- (d) Statutes of Canada 1945, chapter 10 (Statutes of Alberta 1946, chapter 2), being Acts which approved an agreement between Canada and Alberta in respect of differences which had arisen between them in connection with certain water powers developed by Calgary Power Company Ltd. and its predecessors in interest prior to October 1, 1930, and in connection with the licences and water power agreements granted in respect thereof. The agreement provided, inter alia:
  - (i) The certain water powers continued to be vested in Canada and that all rights and obligations of the Crown under certain Letters Patent, water power agreements and the regulations applicable thereto (that is the Dominion Water Power Regulations, commented upon below) continued to be exercised by and binding upon Canada.



- (ii) For the issue of the "Ghost" final licence and that all transmission lines and distributions systems as of January 1, 1930, or thereafter forming part of the licensee's inter-connected electrical power system in Alberta should form part of the undertaking established by the said final licence in accordance with the Dominion Water Power Regulations and that for the purpose of rates, etc. all power and storage developments in Alberta then or thereafter constituting one inter-connected power system should also form part of the said undertaking.
- (iii) The water powers which were the subject matter of the said Ghost licence were deemed to belong and to have belonged to Alberta, subject to the said final licence and subject to the natural resources agreement of December 14, 1929, applying to such licence as if it had been issued prior to the effective date of such agreement, namely October 1, 1930, and as if the rights and obligations of the Crown thereunder and under the Dominion Water Power Regulations had been transferred to and assumed by Alberta by the said agreement.
- (e) The Water Resources Act, Revised Statutes of Alberta 1955, chapter 362, provides in part:
  - (i) "Licence" includes licences issued under the Dominion Water Power Act before April 1, 1931, (Section 2 (1)).
  - (ii) Calgary Power Limited is subject to the Act and Regulations thereunder (Section 4), but that company may continue to exercise its rights under the Dominion licences subject to the Water Resources Act and the Regulations thereunder so far as the same are not inconsistent with the terms upon which the rights are granted (Section 10).
  - (iii) The Dominion Water Power Regulations apply until provincial Regulations are made (Section 76).
  - (iv) The Provincial Regulations must not be inconsistent with the Water Resources Act (Section 78) and such Regulations may apply to the administering or rights, etc. acquired before April 1, 1931, (Section 78, clause (xx)).
  - (v) Nothing in the Water Resources Act is to derogate from any rights to which any person is entitled by the virtue of any licence issued before April 1, 1931, from Canada (Section 85).



The Dominion and Provincial Water Power Regulations will be commented upon in detail below, but it should be noted that the Provincial Water Power Regulations are to be read and applied as being subject to the water Resources Act and to the 1945 Natural Resources Transfer Agreement (Section 72), that the Dominion Water Power Regulations are revoked (Section 74) and that the Provincial Regulations are made as of December 1, 1957, (Section 75).

It will have been noted that both the Dominion and Provincial Water Power Regulations appear to be involved in this matter. The two sets of Regulations are similar, but there are a number of important differences and, if both sets of Regulations in fact apply, such differences appear to present exceedingly complicated, if not insurmountable problems. In connection with the application of the Provincial Water Power Regulations, attention is directed to paragraph 2 of the 1929 Natural Resources Transfer Agreement to which reference is also made in the 1945 Natural Resources Transfer Agreement wherein Alberta contracted to not, by legislation or otherwise, affect or alter any term of the Dominion licences then issued or deemed to have been issued, except either with the consent of the licensee or insofar as any legislation might apply generally to all similar agreements, irrespective of who might be parties thereto. In view of the fact that Calgary Power Ltd. appears to be the only such licensee in Alberta, the contractual effect of any legislation of Alberta which, while purporting to be of general application, affected only that company might conceivably be in doubt. In addition, certain provisions of the water power licences, Water Power Regulations and agreements mentioned below appear to bear directly upon this matter. Calgary Power Ltd. has a number of water power licences, some of which are Dominion Water Powers subject to the Dominion Water Power Regulations, some of which are Provincial Water Powers subject to the Dominion Water Power Regulations and some of which are Provincial Water Powers subject to the Provincial Water Power Regulations.

The licences themselves are, of course, subject to the applicable regulations although some of the earlier Dominion licences issued contained certain provisions as to "takeover" which are different than those contained in the Dominion Regulations, but the Regulations are probably nevertheless applicable.

Certain provisions of some of the licences are of interest in this discussion:

- (a) By Section 14 of the Ghost Final Licence, which affects water powers owned by the Province but which is subject to the Dominion Regulations, the Crown in the right of the Province has the same rights of “takeover” as the Crown in the right of Canada. By Section 3 of that Licence, the works authorized to be maintained and operated thereunder comprise, inter alia, all transmission lines from the power house or other plants and the entire transmission system of the licensee in the Province of Alberta and all necessary property, works, machinery and equipment used and useful for the utilization, transmission, distribution, sale and delivery of power. By Section 5 of that Licence (in pursuance of the 1945 Alberta Resources Transfer Agreement) as from January 1, 1930, all transmission lines and distribution systems then or thereafter forming part of the licensee’s inter-connected electrical power system in the Province of Alberta form part of the undertaking established under the Licence and for the purpose of Section 49 of the Dominion Regulations (respecting rates) the undertaking also includes all other power and storage developments in the Province of Alberta constituting one inter-connected power system.
- (b) By proviso (i) to Section 27 of the Cascade Licence (Dominion) the Minister in the event of “takeover” under that Licence must also take over and pay for the rights of the licensee under any provincial licence for the diversion of water of the Ghost River to Lake Minnewanka and provision is made therefor in Section 9 of the Final Ghost Diversion Licence (Provincial).
- (c) The Spray Final Licence (Provincial) requires that in the event of “takeover” the Crown must also take over and pay for the Bearspaw Final Licence.
- (d) By Sections 15 and 17 (h) of the Brazeau interim licence of which more will be said below, the Crown in the right of Alberta is bound to acquire the lands, works and properties under the Brazeau Licence either upon its termination or upon termination of the Ghost Licence.

The circumstances surrounding the issue of the Brazeau Licence are material and must be considered.

The Brazeau River Development Act, Statutes of Alberta, 1960, chapter 10, provides that the regulations therein referred to are the Provincial Regulations (2 (d)), that the Lieutenant-Governor-in-Council may amend, vary or add to such Regulations and authorize the extension or amendment of any of Calgary Power Ltd.'s existing licences (Provincial) (Section 4 (b)) and that except as otherwise provided in the Act or any agreement made thereunder, the Water Resources Act and the Provincial Power Regulations apply to the company (Section 6).

The agreement between Alberta and Calgary Power Ltd. under the above-mentioned Act defines both the Provincial and Dominion Water Power Regulations (Article 1, Section 1.1 (y) and (z) and in the latter case refers to the Dominion Regulations as being applicable to the Ghost Licence which it will be recalled was part of the subject matter of the 1945 Natural Resources Transfer Agreement. By Article VIII, Section 8.1, the term of the Ghost Licence was extended by 20 years (that is to January 1, 2000) and by Article VIII, Section 8.2, Alberta agreed that it would not before January 1, 1980, exercise the rights of recapture contained in Section 45 (2) of the Dominion Regulations or Section 25 (2) of the Provincial Regulations and that thereafter would not exercise any such rights of recapture unless the entire undertaking and power system (as defined by the Provincial Regulations) was acquired. Under Section 8.3 of that Article, upon the expiry of the Ghost Licence as by the said agreement extended the Province unless such licence be renewed or further extended shall acquire and pay for the entire system of the licensee. Article VIII, Section 8.4 provides that upon acquisition or recapture the company shall assign to the Province all of its rights under the Dominion licences and that the Province shall assume such licences and all liabilities, contracts and commitments of an operating nature pertaining to the licensee's power system.

Some of the differences between the Dominion and Provincial Water Power Regulations which are material to the question of "takeover" are:

- (a) Section 45 (2) of the Dominion Regulations provides for repossession of the works, lands and properties of the licensee prior to the expiry of the licence.



“Work” is defined by Section 1 as follows:

“Works” with reference to any power development, power system, undertaking, etc., means all the physical structures, devices, equipment, appliances, appurtenances and things whatsoever, authorized or required to be constructed, maintained, or operated by the applicant or licensee in respect of of such power development, power system, undertaking, etc.

Section 25 (2) of the Provincial Regulations dealing with possession before the expiry of the licence provides for possession of “all, but not part, of the works, lands and properties included in the system of the licence”.

The definition of “works” contained in Section 1 (ii) of the Provincial Regulations is similar to that contained in the Dominion Regulations but the word “system” used in Section 25 (2) is defined in Section 1 (ee) as follows:

“System” or “power system” means

- (i) all structures and appurtenances,
  - (ii) works,
  - (iii) reservoirs,
  - (iv) transmission lines,
  - (v) distribution lines and works,
  - (vi) electric generating plants whether hydro, thermal, nuclear or otherwise,
  - (vii) coal, gas or other mineral fuel deposits, mines or interests,
  - (viii) lands, clearings, roads and railways,
  - (ix) mills, buildings, machines, appliances, fixtures, equipment and appurtenances,
- used or useful for the purposes of, or as auxiliary to, or in conjunction with, the power development”. (The definition of “system” in the Dominion Regulations is much less broad).



On the basis of the Regulations themselves, it is obvious that the rights of “takeover” under the two sets of Regulations are quite different.

(b) Upon the expiration of the licence or of the notice of termination Section 47 (1) of the Dominion Regulations provides for acquisition of the power development.

The words “power development” used in Section 47 (1) are defined in Section 1 as follows:

“Power Development” or “development” means the physical structures within the severance line required for the storage or use of the stream waters, for the production of power therefrom, and for the transmission thereof, and shall ordinarily include the dams or other diversion works, the power house, the conduits conducting water thereto, the transmission lines within the severance line, and all hydraulic or electrical machinery, appliances, fixtures, equipment, appurtenances and lands and rights-of-way required in connection therewith, also clearings, roads, trails and railways insofar as required to be constructed and still used and useful in connection therewith and not independently profitable.”

The words “severance line” used in the definition of “power development” are defined in Section 1 as follows:

“Severance lines” means the line within which, in the event that the licence should ever be terminated either by the failure to renew it upon the expiry of the term, or by voidance, cancellation, or any other legal process, the lands, works, and properties used or useful in connection with the undertaking should be considered as essentially tributary to the power or storage development, and outside of which such lands, works, and properties should be subject to be taken over on a different basis.

(It should be noted that the Provincial Regulations defines “severance line” (1 (c) c) somewhat differently but since in most licences the severance line is agreed upon, the difference may not be material.)

Section 27 (1) of the Provincial Regulations provides upon the expiration of the licence or of notice of termination for the acquisition of the power system (see definition of “power system” above).

It is implicit in Section 27 of the Provincial Regulations that the right of takeover extends to works both within and without the severance line while Section 47 of the Dominion Regulations in subsections (4), (5) and (6) provides that works outside the severance line can be taken over only with the sanction of the Court. Again the rights of “takeover” under the two sets of Regulations are very different.

- (c) The two sets of Regulations may also result in different amounts of compensation being payable for works outside the severance line.

Section 47 (8) of the Dominion Regulations provides:

“The Minister or the Court, as the case may be, in the determining the compensation to be paid for the said works shall first fix a sum which represents, in their opinion, their then physical value, considering either first cost, replacement cost, or any other similar criteria which will enable them to arrive at the said physical value, but excluding good-will, going concern, franchise value, severance damages and other intangible elements of a like nature; and the Minister or the Court *may* then add to the said sum so determined an amount not exceeding 10 per centum thereof for the purpose of covering such severance damages as is deemed just.”

Section 27 (5) (a) of the Provincial Regulations provides:

“The Minister or the Court, as the Case may be:

- (a) In determining the compensation to be paid for the works outside the severance line shall first fix a sum which represents their then fair physical value, considering actual cost and adjusting the same so as to make allowance for the variation in the purchasing power of the dollar, replacement cost and any other similar criteria as well as actual loss in value of the works due to their physical or functional depreciation or to other causes which will enable him to arrive

at the said physical value, but excluding good-will, going concern, franchise value, severance damages and any intangible elements of a like nature, and to such sum there *shall* be added a further amount not to exceed 10 per centum thereof in lieu of going concern and other intangible elements.”

It might be noted at this point that the two sets of Regulations differ slightly in their definition of “actual cost” in that the definition in the Alberta Regulations includes the costs of engineering services appertaining to selection, investigation and design, as well as construction of developments and works.

(d) Section 28 (1) of the Provincial Regulations specifically requires the assumption of liabilities, contracts and commitments of the licensee while there is no similar provision in the Dominion Regulations although it may be implied.

**(1) BY MUNICIPALITY ON EXPIRATION OF FRANCHISE**

(i) **PROCEDURE** — It is submitted that the provisions of the Municipal Government Act and its predecessor Acts respecting the acquisition by a municipality of a distribution system upon expiration of a franchise is legislation of general application within the meaning of paragraph 2 of the 1929 Natural Resources Transfer Agreement and that accordingly such powers appear to be valid and clear. In addition, the franchises themselves in most cases make specific provision for such acquisition.

(ii) **VALUATION** — The aforesaid provisions of the Municipal Government Act, however, contain no provisions of formulae dealing with valuation and the question arises whether such valuation would be determined in accordance with the Public Utilities Board decision in the *City of Grande Prairie and Northland Utilities* case mentioned above or whether such valuation would be determined under the Water Power Regulations. In connection with the latter, the further question arises as to whether the Dominion or the Provincial Water Power Regulations would be applicable. In this connection, since all of the transmission and distribution lines of Calgary Power



Ltd. form part of the undertaking constituted under the Ghost Licence to which the Dominion Regulations apply, it appears likely that the Dominion Regulations would be applied if indeed either set of Regulations was applicable.

While the formula in the Public Utilities Board decision and either of the formulae under the Regulations may appear to be similar, it is submitted that, in fact, they may not be. As indicated above and by reason of the 1945 Natural Resources Transfer Agreement as well as the provisions of the Ghost Licence, it appears likely that a municipal distribution system would be within the severance line and accordingly, the two sets of Regulations would generally provide for valuation on the basis of actual cost, adjusted for variation in the purchasing power of the dollar less actual loss in value due to physical or functional depreciation or other causes. The “formula” of the Board in the above-mentioned case was reproduction cost new less observed depreciation. In the course of arriving at its value the Board allowed for the fact that reproduction cost new can be less than original or actual cost (for example, technological improvements or reduced costs) and unless the same allowance could be made under the Water Power Regulations by reason of words “functional depreciation or other causes”, the two formulae would not likely be the same. With respect to which formula should apply, it could be argued that, if the Province “took over”, the Water Power Regulations would apply and accordingly if the Province by delegation permits a municipality to “take over” part of the system without spelling out the basis of valuation, that the Water Power Regulations should apply in such a case also.

## **(2) BY POWER COMMISSION**

Section 17 (2) of the proposed Bill reads as follows:

“In their application to a company that is the holder of a licence issued pursuant to the Dominion Water Power Act, Section 16 and this Section shall be construed as being subject to the rights of that company under its licence, the Water Resources Act, the agreement in



the schedule to the Alberta Natural Resources Act in any agreement made pursuant to paragraph 24 of that Agreement, and any agreement made pursuant to the Brazeau River Development Act”.

By reason of that Section and the matters referred to above, it would appear that the Power Commission would have no right of expropriation, at least until January 1, 1980, and if it has any right of expropriation thereafter, the whole system of the company would have to be taken. There is no such provision in the present Act which accordingly could be said to be of general application within the meaning of Section 2 of the 1929 Alberta Natural Resources Transfer Agreement, but by reason of the Brazeau Agreement referred to above, it appears that the Province has effectively put beyond its powers any rights of expropriation, except in accordance with that Agreement.

**(3) BY GOVERNMENT OF ALBERTA**

**(i) PROCEDURE** – Subject to the Brazeau Agreement, the Province has the right under the Provincial and Dominion Regulations in the circumstances mentioned therein to take over the system of the company. In such a case the Provincial Regulations would be applicable to the licences which incorporated the same and except as hereinafter provided the Provincial Regulations would presumably apply to the licences in respect of Provincial water powers which incorporated the Dominion Regulations. With respect to the Ghost Licence, however, which is of a provincial water power and includes all transmission lines and distribution systems, the Dominion Regulations would apply.

**(ii) VALUATION** – As to valuation, it appears likely that the provisions of the Dominion Regulations with respect to the Ghost Development and all transmission lines and distribution systems would apply, but that the provisions of the Provincial Regulations would apply to all other parts of the system.

**(4) BY GOVERNMENT OF CANADA**

(i) **PROCEDURE** – The Dominion has the right under the Dominion Regulations in the circumstances mentioned therein to take over the power development under the applicable licence of Dominion water powers in question, provided that in the case of takeover under the Cascade Licence the Dominion must also take over the rights of the Company under the Provincial Ghost Diversion Licence. The right of takeover, however, is limited:

- (a) In the case of recapture before expiry of the term under Section 45 to lands, properties and works (that is physical structures authorized or required in respect of the power development under the licence) and
- (b) In the case of repossession on expiry or termination of the licence under Section 47 to the power development (that is the physical structures within the severance line);

but in either case the right of takeover does not, by reason of the Ghost Final Licence and the 1945 Natural Resources Transfer Agreement, extend to any transmission or distribution lines.

(ii) **VALUATION** – In such case the provisions of the Dominion Regulations respecting valuation would apply.

**III. RECOMMENDATIONS**

(1) As will be commented upon in detail elsewhere in this brief, the power of a municipality to profit monetarily and otherwise from its electrical system, particularly to the extent that such monetary profit is employed as relief against the property tax burden, is vital and at least to the extent that the powers which would be given to the Power Commission by the proposed Bill impinge upon such right, such powers are opposed.

- (2) Any provision empowering the Power Commission to expropriate any part of a municipal electric system is opposed.
- (3) With respect to the acquisition by a municipality of an electrical system upon termination of a franchise, it is submitted that it should make no difference so far as the municipality is concerned whether or not the owner of such system is a water power licensee. It has been submitted above that the principles laid down in the case of *City of Grande Prairie and Northland Utilities* would apply in the case of acquisition from a utility owner which was not a water power licensee and it is submitted that such principles should also apply to an owner which is a water power licensee. It is stressed that "reproduction cost new" should allow for technological improvements and reduced costs.
- (4) If the Power Commission has and is proposed to have no right of expropriation with respect to a water power licensee or at best a limited right of expropriation, it would be inequitable for the Power Commission to have broader rights of expropriation as to any other utility owner.
- (5) The legislative jungle which surrounds water power licensees has been demonstrated above and creates problems in the matters of acquisition, disposal and expropriation as well as in other matters such as rates which will be commented upon elsewhere in this brief. The application of the Water Power Regulations and the resulting difference in treatment between utility owners who are water power licensees and those who are not create difficulties which should receive serious consideration.
- (6) As submitted elsewhere in this brief a municipality upon annexation of an area which is the subject matter of a permissive order should be empowered to take over another utilities system in the area annexed, subject to paying compensation upon the same basis as in the case of the expiration of a franchise with consideration being given to loss of future earnings (assuming a fixed lifetime for such permissive order which remains unexpired) and whether or not such utility is a Water Power Licensee should not affect the amount of such compensation.





2. . . . . “Should uniform legislation apply to all utility owners with respect to . . . .

(c) Determination of rate base, rates of return and resulting rates?”

\* \* \* \* \*

There is presently no legislation which applies to municipal utilities unless such utilities are brought under the Public Utilities Board Act pursuant to Section 70 (2) and 102. It is submitted that no such legislation should apply to municipal utilities for reasons which will be outlined elsewhere in this brief, nor does the present Power Commission Act or the proposed Bill contain any provision in this connection.

With respect to private utilities however, it is submitted that the rates charged should not be dependent upon whether or not the utility is subject to the Water Resources Act.

The usual approach in arriving at rates is to establish a rate base then to establish a rate of return to be applied to that rate base and the amount produced by such application together with operating expenses is then apportioned amongst the consumers in the form of rates, which apportionment reflects the costs of providing the service in any given case. Such costs are usually made up of commodity costs, customer costs and demand costs. In actual practice, however, the procedure appears to be to establish the amount which the utility requires in order to pay interest on its bonded indebtedness, dividends to its preferred shareholders and a reasonable return on its equity capital. The aggregate of such amounts, together with allowable utility expenses are then recovered from the consumers in the form of rates, notwithstanding the application of such amount to a rate base so as to produce a rate of return. The use of the “rate base approach” however required an examination and comparison of the legislation which applies to utility owners to which the Water Resources Act is applicable and those to whom it is not.

It is proposed to deal firstly with utility owners to whom the Public Utilities Board Act is fully applicable and secondly to deal with utility owners to whom the Water Resources Act is applicable. It should be noted that neither the present Power Commission Act nor the proposed

Bill contemplates any control by the Power Commission over rates and that the present jurisdiction of the Public Utilities Board in that area would be unaffected.

**1. UTILITIES TO WHICH THE WATER RESOURCES ACT IS NOT APPLICABLE**

The rate making process in such circumstances is in large part prescribed by the Public Utilities Board Act and in particular division 1 of part II and is reasonably well settled.

The jurisdiction of the Board respecting rates is conferred generally by Section 71 and Section 81. Clause (a) of subsection (1) of Section 81 provides that the Board may by Order fix just and reasonable rates and by clause (b) of that subsection, the Board may by Order fix proper and adequate rates and methods of depreciation, etc. Under subsection (2) of that Section, the Board in such cases is directed to determine a rate base for the property of the utility that is used or required to be used in the utility's service to the public and to fix a fair return thereon. By subsection (3) of that Section, the Board in determining a rate base as required by subsection (2) is directed to give due consideration to the cost of the property when first devoted to public use, to prudent acquisition cost, less depreciation, amortization or depletion and to necessary working capital. Under subsection (4) the Board in fixing a fair return under subsection (2) is empowered to give due consideration to all facts as in its opinion are relevant.

With respect to determining a rate base, it appears that the Board allows substantial latitude to the utility with respect to the assets which form part of the rate base and the cost at which they are acquired on the ground that such matters are generally a function of management.

With respect to fixing a fair return on the rate base, it appears that in practice the Board ascertains the amount required to pay interest on the utility's bonded debt, dividends on preferred shares and a reasonable return to its equity capital, the total amount of which is then applied to the rate base so as to determine a rate of return. The total amount produced by such a rate of return when added to the utility's approved operating expenses represents the amounts which the utility must recover through its rates. Individual rates are then fixed for individual consumers and

classes of consumers which rates reflect the cost of the commodity supplied to such consumers, the costs associated with the serving of such consumers, and a fair share of the costs of the plant and equipment required to deliver the commodity to such consumers. In the area of depreciation, the Board has traditionally allowed to the utility provision for depreciation as an expense on a straight line basis.

## 2. UTILITIES SUBJECT TO THE WATER RESOURCES ACT

As has been indicated above, the application of the Public Utilities Board Act to a utility which is subject to the Water Resources Act is subject to the latter Act and the Orders and Regulations made thereunder. Such Regulations in fact contain many provisions which bear directly on the rate making process and would accordingly appear to supersede similar provisions in the Public Utilities Board Act which have been discussed above.

As will be indicated elsewhere in this brief, there is the further problem of determining whether the Dominion Water Power Regulations or the Provincial Water Power Regulations or both are applicable to such a utility.

For reasons which are outlined elsewhere in this brief, it is submitted that with respect to rate base, rate of return and rates the Dominion Water Power Regulations are applicable thereto and accordingly the discussion following will refer to the relevant sections of the Dominion Water Power Regulations but the provisions of the Provincial Water Power Regulations similar thereto will be referred to. For the sake of convenience, sections of the Provincial Regulations will be enclosed in brackets.

Section 49 (Sections 31 to 35) provides for the regulation of public utilities subject to the Regulations. Subsection (1) of section 49 (Section 33) provides that the rates charged by any licensee shall never be reduced so as to make it impossible for such licensee to earn a *cumulative* fair net rate of return in accordance with the provisions of subsections (13) and (14) both of Section 48 (subsections (6), (7) and (8) of Section 30).



Section 48 (13) provides that any upward revision of water power rentals shall not make it impossible for a licensee to earn a fair net rate of return on the actual cost of the physical properties used and useful in connection with the undertaking plus due provision for the amortization of such costs (including interest) as may be necessary and legitimate for promoting and organizing the enterprise and for providing capital otherwise than as included in the said actual cost . The costs which are to be amortized shall be fixed in the same manner and at the same time as the actual cost as set out in Section 36 (Section 18).

Section 48 (14) provides that the fair net rate of return defined in subsection (13) shall be considered as being cumulative from the date upon which the licensee first began the sale of power from the initial development.

Section 49 (3) (Section 35) provides that the Board may fix proper and adequate rates of depreciation and also provides that the licensee shall set aside out of earnings and invest such amounts as will conform to the rates so fixed and that the Board may specify the purpose for which and manner in which such amounts are to be expended.

Section 36 which is referred to in Section 48 (13) provides in subsection (1) for the fixation of the actual cost (as defined in Section 1) of the initial development ( as defined in Section 1) or any substantial addition thereto which cost is to be fixed by the Minister or in the event of disagreement, by the Court.

Section 77 (Section 59) provides for appraisals of the value of a licensee's lands, works and properties for a number of purposes including the fixing of rates properly chargeable to consumers. The Section also provides that the basis for such an appraisal is the actual cost of the properties determined pursuant to Section 36 but giving consideration to the loss in value, if any, in the said properties due to physical or functional depreciation or otherwise as well as to the variation in the purchasing power of a dollar ( as provided in Section 47 dealing with compensation on expiry or termination of licence).



The problems associated with these Regulations are complex and considerable and include:

- (1) Section 49 (1) and Section 48 (14) both refer to the rate of return as being "cumulative" from the date upon which the licensee first began the sale of power from the initial development. This provision seems to imply that in determining rates, the Board must in effect determine a fair rate of return for any year under review so as to ascertain the surplus of deficiency which should be carried forward into the next succeeding year. There is the additional difficulty of determining the date from which such cumulative rate is to be determined, that is, the date upon which the licensee first began the sale of power from the initial development. As an example of this difficulty, in proceedings recently before the Public Utilities Board and the Appellate Division of the Supreme Court of Alberta, it was the submission of Calgary Power Limited that such commencement date was January 1, 1930, while the cities of Red Deer and Jasper Place submitted that such commencement date was May 16, 1947. The substantial result of the determination of such a disagreement can be readily appreciated.
- (2) It will be noted that the "rate base" under the Regulations is the actual cost as therein defined and determined of property used and useful plus provision for amortization of costs of promoting and organizing the enterprise and of providing capital otherwise than as included in the definition of actual cost. Since such latter costs are to be fixed in the same manner and at the same time as the actual cost is fixed under Section 36, the further question arises as to whether or not the utility is entitled to have included in the "rate base" upon which it is entitled to earn a return any amount for "working capital" which term reflects the utility's investment from time to time in inventories. It should further be noted that the actual cost or "rate base" upon which the utility is to earn a return makes no provision for depreciation which the Board is entitled to fix under Section 49 (3). If, however, for the purpose of determining rates properly chargeable to consumers an appraisal was made under Section 77, such appraisal would reflect both depreciation and changes in the purchasing power

of the dollar. With respect to depreciation further problems are raised by reason of Section 49 (3) and Section 79 (Section 60). Section 79 requires a licensee to keep a true and detailed account of all expenditures made in respect of its works, lands and properties and to file annually a return which is to show, inter alia, depreciation in value from any and all causes for that year (see subclause (iii) of clause (a) of subsection (1) of Section 79) and subsection (2) of Section 79 provides that the decision of the Minister in regard to methods of allowing for depreciation is final. On the other hand and as pointed out above, Section 49 (3) gives to the Board the power to fix rates of depreciation and the question accordingly arises whether the Minister or the Board is to fix the quantum of depreciation.

Notwithstanding the promulgation of the Provincial Water Power Regulations in 1957, it is submitted that the Dominion Water Power Regulations apply in the matter of rates, etc. If, however, the Provincial Water Power Regulations have had application since 1957 or if both sets of Regulations apply, then certain differences between the two sets of Regulations become material in the question of the rate making process.

(i) The definition of actual cost in Section 1 (c) of the Provincial Regulations includes in clause (ii) thereof the cost of engineering services appertaining to the selection, investigation and design of development and works which costs are not included in the definition of actual costs contained in Section 1 of the Dominion Regulations. The amount of such costs is not likely particularly significant in the light of the overall "rate base".

(ii) Section 30 (8) of the Provincial Regulations which provides for the cumulative fair rate of return referred to in Section 48 (14) of the Dominion Regulations also provides that such return shall be net after all taxes now or hereafter imposed, including, without limitation, taxes on income. Taxes on income is defined in Section 1 (ff) of the Provincial Regulations and includes reserves for any deferred taxes if the reserves result

from the licensee's accounts not recording the entire deductions actually claimed and allowed for tax purposes. The Dominion Regulations contain no similar provision and it appears likely that under the Dominion Regulations only the amount of taxes actually paid would be allowed as a proper expense of the utility.

It will be obvious from the foregoing that there are substantial differences under the Public Utilities Board Act on the one hand and the Water Power Regulations on the other in the area of determining a "rate base" to which a fair rate of return is to be applied. In the case of the Public Utilities Board Act, the fair rate of return is to be applied to a depreciated original cost rate base while in the case of the Water Power Regulations a fair rate of return is to be applied to a depreciated original cost rate base while in the case of the Water Power Regulations a fair rate of return is to be applied to either an undepreciated actual cost rate base or perhaps an actual cost rate base adjusted for physical and functional depreciation and variations in the purchasing power of the dollar. It appears obvious that if there were two utility owners which had identical investments in plant, one of whom was subject to the Water Resources Act and one of whom was not, the same rate of return to each of such utility owners would produce different amounts. The equity of such a situation appears questionable to say the least and could only be resolved if the "practical" method of arriving at rates referred to above was used rather than the "theoretical" methods outlined in the Public Utilities Board Act and the Regulations. Even this however, would not eliminate the differences resulting from a utility under the Public Utilities Board Act being entitled to a fair *cumulative* rate of return.

## RECOMMENDATIONS

To summarize, there is not presently any legislation which applies to municipal utilities (not brought under the Public Utilities Board Act) in the matters of rate base, rate of return, or rates, nor, it is submitted should there be. The proposed Bill continues to recognize the status of municipal utilities. With respect to private utilities however, to the extent that the differences outlined above were significant in determining the rates payable by consumers uniformity would most certainly be desirable and equitable.





3. “The manner of granting, varying, cancelling and/or terminating over a period of years existing and future permissive orders.”

\* \* \* \* \*

The notation to Section 35 of the proposed Power Commission Act, 1968, states:  
 “Commission may grant approvals as to designated service areas. These approvals, or ‘permissive orders’ as they are commonly called, are presently made by the Public Utilities Board.”

It is understood that the proposed Act proposes to transfer the jurisdiction over “permissive orders” from Section 97 of the Public Utilities Board Act to the control of the Power Commission by virtue of Section 35 of the proposed Act.

Firstly, it may be pointed out that the repeal of Section 97 of the Public Utilities Board Act does not transfer the jurisdiction over the previous permissive orders to the Power Commission, the Public Utilities Board retaining full jurisdiction over any previous permissive orders that it may have granted. It is submitted that if the jurisdiction over permissive orders be so transferred, it would be in the public interest to transfer jurisdiction over previous permissive orders to the Power Commission from the Public Utilities Board.

The proposed Power Commission Act by its section 35 purports to grant approvals which would be permissive orders. Section 35 states as follows:

Section 35 (1): “Notwithstanding anything in any other Act or in any special franchise, no electric utility owner shall supply power in any land or area of Alberta without the approval of the Commission.

(2): “Approval under this section shall not be given unless the Commission is satisfied, having regard to the availability of any other source of power and to any other circumstances, that it is to the general benefit of the land or area.

(3): “Before granting any approval required by subsection (1), the Commission shall also give consideration to the present or future need for the extension of electrical service to rural areas throughout Alberta.

(4): “In any approval granted under this section the Commission may (a) impose such conditions as appear to the Commission expedient or necessary, and (b) specify the land or area in respect of which the approval is made, which shall be referred to in the approval as the ‘designated service area’.

(5): “It is a condition of every approval granted by the Commission to the company under subsection (1) that the company shall file with the Public Utilities Board a schedule of the rates, tolls or charges to be charged by it in the designated service area, before it supplies power in that area.

(6): “The Commission shall, with respect to each electric utility owner, determine as the designated service areas of that owner all areas served with power by it as of the commencement of this Act and for the purposes of subsection (1), each electric utility owner shall be deemed to have the approval of the Commission to supply power in the designated services areas so determined for it.

(7): “For the purpose of carrying out its duties under subsection (6), the Commission shall treat the area specified in an approval given under Section 97 of the Public Utilities Board Act, or its predecessors, as a designated service area of the electric utility owner to whom the approval was granted.

(8): “The Commission shall notify each utility owner of the designated service areas determined for it under subsection (6).”

The most outstanding question to be raised in this regard is that there does not appear to be any provision in respect of varying, altering or terminating such approval as to a designated service area. Similarly, there does not appear to be any guide lines set down in respect of such variation, alteration or termination, although section 35 (2) speaks of the “general benefit of the land or area” in respect of the granting of approval. It would not appear that Section 35 (4) (a) was intended

to cover a variation, alteration or termination of the approval as to a designated service area.

Further, it would seem that the “permissive orders” which would be granted as “approvals for designated service areas” are of wider impact than the permissive orders granted under Section 97 of the Public Utilities Board Act. Section 97 stated:

- “Section 97 (1): “No person shall supply electrical power within any county, municipal district or improvement district, to any person without the approval of the Board, which shall not be given unless the Board is satisfied, having regard to the availability of any other source of power and to any other circumstances, that it is to the general benefit of the area.
- (2): “Before granting any approval required by subsection (1), the Board shall also give consideration to the present or future need for the extension of electrical service to rural areas throughout Alberta, and in its order granting the approval shall impose such conditions, with respect to the construction of main transmission lines and service lines and with respect to the equipment used or required for or in connection with the operation thereof, as appear to the Board expedient or requisite having regard to existing or future extensions of electrical service to rural areas.
- (3): “Notice of any application to the Board for the approval required by subsection (1) shall be given by the applicant to the Alberta Power Commission.”

It is submitted that permissive orders under Section 97 of the Public Utilities Board Act were only valid in so far as they referred to the jurisdiction of the corporate body of a county, municipal district or improvement district. Section 35 of the proposed Power Commission Act would by Section 35 (6) blanket the whole of the Province served by electric utilities as areas of “permissive orders”. It is submitted that such a grant under Section 35 (6) would place the Power Commission in a very weak position in that: (1) there is no provision for the variation, alteration or termination of the permissive order and (2) there would be no terms or conditions attached to the “permissive orders” created thereby by Section 35 (6).



It is understood that even under Section 97 of the Public Utilities Board Act, there was considerable confusion as to the nature of a permissive order in respect of precisely what rights and privileges it should give and of the extent and duration of it. This confusion was present although the Board was given clear authority in respect of such matters by Section 56 and 52 of the Public Utilities Board Act.

“Section 56: The Board may rehear an application before deciding it, and may review, rescind, or vary any order or decision made by it.”

“Section 52 (1): The Board may direct in any order, that the order or any portion or provision thereof, come into force at a future fixed time, or upon the happening of any contingency, event or condition specified in the order, or upon the performance, to the satisfaction of the Board or a person named by it for the purpose, of any terms that the Board imposes upon any party interested, and the Board may direct that the whole or any portion of the order have force for a limited time or until the happening of any specific event.”

Note that no similar blanket provision for review is contained in the proposed Act.

This question of review has arisen before in respect of the permissive order and is yet unsettled. Various legal and practical considerations have shrouded any basic solution from light. On the one hand, there is clear legislative authority to revoke the order giving the approval and queries as to whether the correct procedure has been adopted (that is, a by-law confirmed by the electorate) and there is unquestionably, in the public interest, a need for periodic review of the situation. On the other hand, there are arguments that the permissive order is a property right in perpetuity and that when an approval is given, it cannot be revoked. Consider, however, that the approval granted under Section 97 of the Public Utilities Board Act may be construed to be one that remains under continual scrutiny; this is the preferable construction.

However, it is submitted that the determination of these sub-questions is not as important as taking an overall view of the situation. The “permissive order - designated service



area” question is one that must be regularized. Legislative action should be taken which would provide for the following in general:

The Power Commission should have jurisdiction over “permissive order - designated service areas” which should be one classification, both in respect of future and past grants; designated service areas should not apply to municipal systems operating within their corporate limits as they may be from time to time; the past and future grants should be far more specific as to what is actually being granted and should contain a provision for a definite time period plus periodic review; upon annexation by a municipality having a municipal utility, there should be a provision for the orderly turnover of service to the municipality either at the end of the specified time or at an earlier date if the municipality is prepared to pay not only for the actual physical installations but also for any loss of anticipated profit during the term of the remainder of the grant.

It is submitted that a permissive order is not an exclusive right to serve the designated service area. However, it would be inappropriate in most cases to have two electric utility owners serving the same area as the supply of electric power tends to be a natural monopoly. Therefore, it would be inadvisable in most cases to allow a second electric utility owner to compete with the original electric utility owner who was granted a previous permissive order in respect of the designated service area. However, it is submitted that there should be terms and conditions attached to the granting of an approval as to a designated service area and that the fulfilment of such terms and conditions should be subject to review on the initiative of the Power Commission itself or on the complaint of an interested party. It is further submitted that the criterion to be applied in the grant, variation, alteration, or termination of a permissive order should be what is in the public interest of the power consumer in the designated service area.

The anomalous situation of a municipality which has annexed lands which are subject to a permissive order is illustrated in The Municipal Government Act, S.A. 1968, Chapter 68. By Section 2.26 special franchise is defined as:

“ ‘special franchise’ means every right, authority or permission whether exclusive or otherwise, to construct, maintain or operate, within a municipality, in, under, above or on or through or across any highway, road, street, lane, public place or public water within the jurisdiction of the municipality of any poles, wires, pipes, tracks, conduits, buildings, erections, structures or other things for the purpose of bridges, railways, bus lines or other transportation systems or for the purpose of conducting steam, heat, water, natural gas or electricity or any property, substance or product capable of being transported, transmitted or conveyed for the supply of water, heat, light, power, transportation, telegraphic, telephonic or other services.”

Section 269 ensures that the electorate has to be consulted in respect of the approval of a contract for the supply of a utility for up to 20 years before a special franchise is granted. This special franchise must then be approved by the Public Utilities Board. Is a permissive order in essence different in substance than the approval of a “rural” embryonic special franchise? It is submitted that it is not and that there should be some life duration attached to it. Any other method would result in an absurd situation in which ancient privileges to serve a few rural customers would become a modern right to serve many urban citizens in the same area which had now completely changed in character and context. Surely, Section 274 (5) when combined with Section 274 (4) of The Municipal Government Act was designed to prevent the municipality only from destroying the value of the permissive order. They were not designed to prevent the orderly transference (with subsequent exclusive jurisdiction) to municipal utility service of an area served by a private utility under a permissive order, with compensation if early takeover were desirable.

In respect of the present formulation of Section 35, the following comments are submitted:

- (a) Section 35 (1) would appear to take away the initiative from the local authority and its electorate in that there is now a third step imposed upon the system of approving a special franchise. Presently the approval of the Public Utilities Board is obtained under Sections 94 and 96 of the Public Utilities Board Act after the electorate has consented to the negotiated

- contract. Under this system the municipality had a choice as to who would serve it and it could obtain the best possible terms, conditions and prices from any electric utility owner who would service the area. Now with the imposition of Section 35 (1) the approval of the Power Commission must be obtained before the electric utility owner can supply power to the area and thereby the choice of the municipality is limited in essence to one — the one electric utility owner who has received an approval to service the designated service area.
- (b) Section 35 (1) prohibits the “supply” of power without the approval of the Power Commission. There would not appear to be any definition of “supply” and there would appear to be a contradiction in terms in respect of the heading of Division 2 — “supply and distribution of power”. Is it intended that “supply” in Section 35 (1) means “generate, transmit and distribute” or “generate” or “distribute”?
  - (c) Section 35 (1) contains the phrase “land or area” without giving any guideline as to how large or small this “land or area” would be.
  - (d) Section 35 (2) should be amended to allow the Commission to have regard to the proposed availability of any other source of power. Secondly, it is submitted that it may be inadvisable to limit the Commission to considering the availability of power as power is defined in the Act (“electric power and electric energy”). It is submitted that the Power Commission should have regard to the availability of all types of energy. It may well be that the phrase “and to any other circumstances” was intended to cover this situation; however, it is submitted that such a phrase is too wide and gives no guideline to the Power Commission and that the phrase is therefore subject to criticism.
  - (e) Section 35 (2) instructs the Commission that approval may not be granted unless the Commission is satisfied that “it is to the general benefit of the land or area.” It is submitted that it is the general benefit of the power consumers in the area to be served that should be considered, rather than the general benefit of the land or area itself.



- (f) It is submitted that there is an overlapping of functions between the Power Commission under Section 35 (2) in respect of “permissive orders” and the Public Utilities Board in respect of approving of a franchise or privilege under Section 96 (c) of The Public Utilities Board Act.
- (g) Section 35 (5) makes a condition of every approval granted that the company file with the Public Utilities Board a schedule of the rates, tolls or charges to be charged by it in the designated service area. The question then arises as to what the procedure would be when the company wishes to either raise or lower its rates in the future. The function of fixing the rates would appear to be left with the Public Utilities Board in respect of private utilities (and those municipal utilities which option to come within its jurisdiction); but the proposed Power Commission Act continues to recognize that the municipalities should be in full control of the question of fixing their own rates.
- (h) There does not appear, on the surface, to be any reason for a company filing such rates with the Public Utilities Board under Section 35 (5). However, it is submitted that it may well be outside the jurisdiction of the Power Commission to consider the level of such rates before granting approval as to a designated service area as the Public Utilities Board has jurisdiction over rates.
- (i) Section 35 (6) protects “all areas served with power” by a company as of the commencement of this Act. This would, for example, allow, depending on the timing of the commencement of the Act, Calgary Power Ltd. to retain Jasper Place as a designated service area although it has agreed with The City of Edmonton by negotiation to terminate its services in this area.
- (j) Section 35 (6) gives the deemed approval of the Commission to the electric utility owner serving the designated service area at the time of the commencement of the Act; however, there are no terms or conditions placed upon such approval. As previously pointed out,



the confusion over the “permissive orders” granted by the Public Utilities Board resulted from an uncertainty as to the rights and privileges contained therein and the extent and duration of such permissive orders. To grant approval under Section 35 (6) in such a blanket fashion is merely to invite the same confusion.

- (k) There does not appear to be any provision for appeal by an electric utility owner if the designation by the Power Commission is less than the electric utility owner feels that it should have.
- (l) Finally, as discussed above, there is no provision for termination or adjustment of any of the approvals given by the Power Commission.
- (m) Section 36 (1) (c) would appear to raise the possibility of an electric utility owner “supplying” power to an area in which it did not have approval as a designated service area. Similarly, Section 36 (1) (d) is subject to the same criticism.
- (n) The Municipal Government Act would have to be amended to ensure uniformity of purpose.

#### **RECOMMENDATIONS:**

1. Designated service areas should not apply to municipal systems operating within their corporate limits as they may be from time to time.
2. Designated service areas and permissive orders should be regularized; they should be far more specific as to the privileges actually being granted and should contain a provision for a definite time period plus periodic review.
3. Upon annexation by a municipality operating a power utility, there should be a provision for the orderly turnover of service to the municipality at the end of the specified time (or earlier if loss of anticipated profit is considered) upon proper compensation being paid by the municipality.



4. "The degree of control to be exercised by the Power Commission with respect to:
- (a) Setting up and allocating to a utility owner designated areas including all or portions of a municipality.
  - (b) Regulating the construction of new generating and transmission facilities and the exchange, buying and selling of power among the utility owners.
  - (c) Should (a) or (b) be varied when a municipality is supplying power within its corporate limits."

\* \* \* \* \*

As has been indicated and stated at length with detailed reasons elsewhere in this brief, the municipality should be allowed to continue its rights in respect of electric power without direct regulation by the Power Commission or other provincial regulatory body, save and except for three areas:

- (a) municipal utilities should conform to substantially the same uniform accounting standards that are required of privately owned utilities (after mutual agreement as to such standards and modifications) with ensuing publication of comprehensive financial and operation reports,
- (b) the activities of municipal utilities in serving areas outside the corporate boundaries of the municipality, as they may be from time to time, should be subject to control as to the rates charged, territory to be served and the service obligations within such territory, and
- (c) the municipal utility has an undeniable right to own generation and transmission facilities outside the corporate boundaries of the municipality, as they may be from time to time; however, the municipal utility would be subject to rules of general application as to the standards of such facilities, the use of water for generation and/or cooling, transmission lines crossing other transportation systems, water pollution,

zoning, etc. (that is, there would be no question of prohibition of the facilities but only a question of the general regulation of all such facilities, be they municipally or privately owned).

The responsibility of the municipality cannot be emphasized too much, both in respect of its duty to provide all essential civic services and utilities to ensure that the urban community is stable, pleasing and progressive and in respect of the direct democratic relationship that the municipality has to the persons that it serves. These two reasons have been the salient points in the general refusal of other general legislation to bind the municipal systems into such regulation as proposed by the draft Bill. It is submitted that there is no need to superadd the responsibilities already admirably shouldered by the municipalities who engage in supplying power. Such omnibus legislation can serve no useful purpose as it meets no demand. Therefore it is submitted that the answer to part (c) of this question is that a municipality should not be regulated by the Power Commission in respect of supplying power and related matters within its corporate boundaries, as they may be from time to time.

#### **DESIGNATED SERVICE AREAS:**

A review of S. 35 of the proposed Act is contained elsewhere in this brief. With the proviso that designated service areas should not apply to a municipal utility within the corporate boundaries of the municipality as they may be from time to time, the following comments are made with respect to such service areas and control over such by the Power Commission.

S. 35 (1) envisages a situation wherein the electorate of a municipality may wish that a particular company serve the community with power either because of rates, standard of service or a combination thereof. Such desire could be vetoed by the refusal of the Commission to grant the said company the right to serve such municipality. Such refusal would not be subject to either appeal or a public hearing in the first instance under S. 55. One situation could be completely unfair to the company and/or the municipality if the "land or area" indicated in S. 35 (1) is



construed by the Commission to be wider than the area applied for. Such would appear to be the intention as determined by S. 35 (3) wherein the Commission is directed to give consideration to the present or future need for the extension of electrical service to rural areas throughout Alberta. No limitation, either legal or practical, is placed upon the Commission's discretion. Therefore the applying company and/or municipality may be faced with a question of the supply of a much larger area than the requesting municipality itself, and such area need not necessarily be contiguous to the said municipality, and may indeed encompass the whole of rural Alberta.

Despite the great amount of confusion about and litigation in respect of permissive orders under S. 97 of the Public Utilities Board Act, this situation was left without solution and indeed the draft Bill leaves the designated service area question in the same predicament. It is submitted that it is necessary to place in the legislation provision for the periodic review, termination, amendment and alteration of such designated service areas. It is a virtual necessity that such service areas be keyed to the lives of the special franchises granted where applicable. Furthermore, jurisdiction over existing permissive orders with power to amend should be transferred to one regulatory body, preferably the Power Commission.

**REGULATION OF FACILITIES AND THE EXCHANGE,  
BUYING AND SELLING OF POWER AMONG  
UTILITY OWNERS:**

Such control and regulation envisages a substantial financial and social investment by the Province in giving the regulatory body enough resources to regulate not only effectively, but wisely. The responsibility of ensuring the progressive provision of low-cost, reliable power to all the citizens of Alberta is a very grave one. Intensive and extensive research must be engaged in to allow such regulatory body to not only keep abreast of the situation, but to plan and to adjust well into the future. Such an industry as power does not lend itself to ad hoc, backwards-looking regulation. The task is such that it presently involves scores of managers, planners, financiers, etc. in the individual utilities to handle the responsibility and they are making strides towards full

negotiated co-operation. To impose such regulation by an outside body, and one that is a potential utility owner, is necessarily disruptive. Negotiation would tend to disappear, to be replaced by competition to secure advantage from the regulatory body. Nor can the Commission rely upon such individuals to do the research and planning for it — they must naturally present the interests of the individual utility owners. Can the Province afford to staff and supply such a regulatory body, or once having imposed the regulatory body upon the present factual framework, could the Province afford not to become deeply involved in all aspects of power. This same consideration applies in respect to the designated service areas.

Such regulation of generation and transmission facilities would seem useful only in the respect that the various utility owners should consult with each other to guard against oversupply in any particular area or time. The Commission's function would seem more applicable to reviewing future growth and power consumption patterns in general and advising the public utility owners with respect to potential undersupply. Such role could not be fulfilled by the enactment of sections 33 and 38. However, it would appear that the public utility owners have generally been quite responsive to power demands.

With respect to the exchange, buying and selling of power among electric utility owners, it is submitted that the major parties involved in the generation of power in the Province, Calgary Power Ltd., Canadian Utilities Limited and The City of Edmonton, have reached substantial agreement as to such a program. Therefore it would appear unnecessary because of practice to insert such a far-reaching legal provision as S. 36 in the proposed Bill. Such agreement among the parties comes as a result of a considerable and detailed analysis and appreciation of each of their respective positions and represents a trend towards beneficial co-operative integration.

It is clear that S. 36 was not intended for emergency use, as the Commission is only given jurisdiction after it has given notice to and heard the parties interested. Therefore, if the future does not turn out as well as indicated by past action by the various power utility owners, this situation could be more easily and directly solved by a direct amendment to the Act to cure

the precise illness, rather than giving the Commission much wider than necessary powers now. It is also queried how all “the parties interested” may be determined.

Finally, it is submitted that, if S. 36 is to be inserted, there should be a provision to safeguard the direct consumers of the individual power utilities. That is, for example, the interchange of power should be imposed after the needs of the “local” customers are met and such interchange should be related to a reasonable cost of production. Similarly, the generation plant of one utility owner should not be forced to inactivity thereby raising the costs of that particular power utility owner strictly in the interests of lowering the costs of the supplying owner.

#### RECOMMENDATIONS:

1. Municipalities should not be liable to regulation except as to:
  - (a) uniform standards of accounting and reporting
  - (b) serving areas outside the corporate boundaries, and
  - (c) general “approval licensing” regulation of generation and transmission facilities outside the municipality’s corporate boundaries.
2. The Province should not involved itself in unnecessary, expensive and onerous responsibility in regulating and controlling power in Alberta in light of the established co-operation among the power utility owners.
3. Designated service areas should not affect municipal utility systems.
4. The duration, terms and conditions of designated service area should be stated and clarified. Provision should be made for periodic review and alteration. Designated service areas should be terminated within a reasonable time from municipal annexation. Similarly, permissive orders should be “regularized” or “transformed”.
5. The advisability of regulating the construction of generation and transmission facilities and the interchange of power is questioned in light of the past record. It is questionable as to what the immediate or foreseeable benefit to the citizens of Alberta would be.





5. "Should the Power Commission be limited to a regulatory function exercising administrative and quasi-judicial powers only? This may necessitate the establishment of a separate provincial corporation, if required, to be given the powers currently assigned to the Power Commission to generate and supply power or to take over existing utility systems."

\* \* \* \* \*

The question at issue in respect of the above matter is that the Alberta Power Commission may find itself in the situation in which its impartiality may be questioned when there may be an apparent conflict when it is both judge and interested party in an application. It is submitted that the Power Commission would not necessarily have to be a party to any such application for the question of impartiality to arise. The taint of impartiality would colour any situation in which the Power Commission *qua* regulator was requested to give its approval or to grant a permit when the refusal by the Power Commission *qua* regulator would be a possible advantage to the Power Commission *qua* electric utility owner or supplier.

This question of impartiality is a matter of great concern when the various provisions of the proposed Power Commission Act, 1968, are reviewed and the nature and extent of the powers and procedures slated to be given the Commission are determined. It is submitted that there should be a separation of the Power Commission *qua* regulator and the Power Commission *qua* interested party (as electric utility owner) to guard against the imputation of any conflict of interest, bias or impartiality on the part of the Power Commission.

The Honourable J. C. McRuer, former Chief Justice of the High Court of Ontario, had the following comments to make on impartiality in his report on *Royal Commission Inquiry into Civil Rights (1968)*. He states at p.77:

"The rule against interest or bias applies without qualification (other than necessity as in the case of the courts) to judicial tribunals other than the courts. If a member of a

tribunal has an interest in the subject matter or is biased, he is disqualified from making a decision, and if he purports to do so his decision will remain unauthorized.

'The rule also applies to administrative tribunals exercising power, with two possible qualifications:

- (1) where a power is conferred on a Minister and the power is exercisable in connection with governmental objectives, the political interest of the Minister in promoting these objectives will not disqualify him from making a valid decision.
- (2) where a tribunal is constituted to provide representation on it of certain general interests, such as employers and employees as in the case of The Ontario Labour Relations Board, the general interest of the members as employer or employees will not disqualify them from acting for they are selected because of their special knowledge and expertness. What interest they may have in their respective capacities does not alter the binding effect of the oath of impartiality provided under the Act. The representative members of a tribunal are not advocates for the interests they represent, but as judges owe an equal duty to all interests affected by the decision. If a representative member has a special personal interest as a member of a particular class, he may be disqualified.' "

The Honourable Mr. McRuer elaborated on the question of impartiality at p.252 of the Inquiry:

"The principle of disqualification for bias has been applied to the Ontario Labour Relations Board. That Board consists of a Chairman and an equal number of representatives of employers and employees. These representatives are appointed because of their knowledge of labour management relations from the two different points of view. They may not, however, have a personal interest in the dispute before them, contrasted with their general representative interest. A representative of a labour organization who was a member of the Board was also an executive officer in an organization affiliated with one of the parties to a dispute before the Board. He was required by the terms of his executive office to

promote the interests of its affiliated organizations. It was held by the courts that he was disqualified by bias in law from reaching an impartial decision. The Board in which he participated was prohibited from proceeding. (R. vs. Ontario Labour Relations Board; ex parte Hall, (1963) 2 O.R. 239)."

In the Hall case (which was decided by McRuer, C. J. H. C.) it was stated at p.244 - 5:

" 'Real likelihood of bias' is not to be determined by an attempt to analyze the mind or character of Mr. Archer in this case, but by considering objectively whether or not a reasonable man in all the circumstances might suppose that there would be an improper interference, conscious or unconscious, with the course of justice if Mr. Archer sat..... I think it is asking too much of human nature to hold that the chief executive of an organization which had announced a declared policy of destroying another organization should sit to decide disputes between the two organizations or their constituent affiliates."

The proposition was stated by Viscount Cave in *Frome United Breweries Co. vs. Keepers of the Peace and Justices for County Borough of Bath*, (1926) A.C. 586 at p. 590 - 1:

"My Lords, if there is one principle which forms an integral part of the English Law, it is that every member of a body engaged in a judicial proceeding must be able to act judicially, and it has been held over and over again that, if a member of such a body is subject to a bias (whether financial or other) in favour of or against either party to the dispute, or is in such a position that a bias must be assumed, he ought not to take part in the decision or even sit upon the tribunal. This rule has been asserted, not only in the case of Courts of justice and other judicial tribunals, but in the case of authorities which, though in no sense to be called Courts, have to act as judges of the rights of others....from the above rule it necessarily follows that a member of such a body as I have described cannot be both a party and a judge in the same dispute, and that if he has made himself a party he cannot sit or act as a judge, and if he does so the decision of the whole body will be vitiated."



It is submitted that the same principle holds true when it is the “tribunal” itself which has the interest in the matter which must be decided before it. Furthermore, it is submitted that the Power Commission would not fall within the first qualification (p. 77) as the Power Commission is not a political body responsible for its decisions to the electorate nor is the Act framed in such a manner that the Power Commission would be carrying out strictly administrative details in its application of the Act, rather it would be formulating policy itself.

There would appear to be a case of *casus omissus* in the proposed Act in that although the Act provides for the takeover or the start-up of an electric utility by the Power Commission, it would not appear that by such ownership, the Power Commission is subject to any of the rules and regulations of the proposed Act which should be of general application. Section 3 (1) states:

“The Alberta Power Commission is hereby continued as a body corporate under the same name.”

However, Section 2 (2) defines owner as follows:

“ ‘Owner of an electric utility’ or ‘electric utility owner’ means a company in respect of a private utility or a local authority in respect of a municipal utility.”

Therefore, although the Power Commission is an owner in fact, it is not defined as such to come within the purview of the Act. It is submitted that the proposed Act should be amended so as to include the Power Commission in the definition of owner; otherwise the conflict created by the interest of the Power Commission as both regulator and owner would appear to be even more perverse to the public. It is further submitted that to proceed on the basis of the Act as it is now drafted would not be in the public interest.

It is interesting to note that Section 4 of the proposed Act was inserted to provide a restriction upon the private holdings and interests of members of the Power Commission to prevent a conflict of interest. Is it not the same principle applicable to the Power Commission itself in that it has the potential of becoming an electric utility owner. It is further submitted that such a provision as Section 4 does not limit the rule against bias, but merely provides a guideline to the



members of the Commission.

The Honourable Mr. McRuer examined the position of a Commission being both prosecutor and judge in the same cause at p. 79 of the Inquiry:

“The adversary system in the ordinary courts excludes the necessity for a specific rule that a judge should not be prosecutor and judge in the same cause. Notwithstanding this, the decision of a judge may be set aside if he assumes that role beyond the bounds of propriety.

“No specific rule applying to tribunals generally has been developed but the principle is of importance, having regard to the nature and functions of a particular tribunal.

“Certain statutes ignore the principle entirely. Under The Liquor Licence Act (R.S.O. 1960, Chapter 218) the Board may make such investigation as it deems expedient for the due administration of the Act respecting any person or the affairs or conduct of any person, and into any matter pertaining to the sale or handling of or transactions of liquor. The Board may refuse to issue, transfer or renew a licence to any person who in the opinion of the Board is not a fit and proper person.

“Under these provisions the Board is empowered to investigate the conduct of an individual and to base its decision on its own investigation. It performs the functions of prosecutor and judge.

“Whether the members of a statutory tribunal are disqualified by interest or bias from making a decision is not a question for the tribunal to decide ‘authoritatively’; it is one to be determined by the courts as an objective requirement to the exercise of the power of the tribunal.”

It is therefore submitted that it would be fruitless to allow the tribunal to fill the many roles that it could conceivably have — judge, prosecutor and interested party. The retention of such procedure would merely be to invite an application to the courts by any party who was dissatisfied

with the determination that the Power Commission made in any instance. It is submitted that it is possible to frame the legislation in such a way that it is permissible, although perhaps not desirable, for the Power Commission to be both judge and prosecutor when it acts in its regulatory function; however, when its function as interested party is super-added to its role as regulator there is a patent conflict of interest.

The Honourable Mr. McRuer stated at p. 95 of the Inquiry:

“When appraising existing powers and creating new powers, two underlying principles of the Rule of Law demand consideration and an understanding of the ingredients of the statutory powers. These principles are:

(1) No administrative power should be conferred unless it is necessary and unavoidable in order to achieve the social objective or policy of the statute. It ought not to be conferred where rules or standards for judicial application can be stated.

(2) Where an administrative power is necessary and unavoidable, the power should be no wider in scope than is demanded to meet the necessity. If these principles are violated there will be an unjustified encroachment on civil rights.

“The process of determining whether any power is necessary, and if so the nature and scope required to carry out the statutory scheme, must precede the application of other constitutional doctrines. It is only after the nature and scope of the power has been settled that there can be a determination of the appropriate tribunal to exercise it, and of the extent to which the exercise of the power should be controlled by a judicial review or appeal. These matters may be interwoven. For clarity of discussion, it is necessary to separate them.

“In determining whether a particular existing power or proposed power is or will be an unjustified encroachment on civil rights under the principles we have stated, the social policy of the statute must be examined. The policy of the statute determines what power will be required to carry it out effectively. The policy must be analyzed in detail to determine whether a power of any kind is required, and if so the characteristics it should

possess. No general formula for the abstract analysis of the infinite variety of social policies that may be the subject of legislation can possibly be laid down. It is, however, possible to illustrate how an appreciation of the possible ingredients of powers that may be conferred by statute can assist in furnishing a technique for the analysis of a particular power in relation to the particular policy of the statute conferring it. Certain general conclusions can then be drawn."

Therefore, it is submitted that prior to dividing up the responsibilities which are embodied within the present proposed draft, there should be an analysis of the policy behind such draft. It is far more admirable to take a look and determine where we wish to go, rather than arriving at a position in the future and looking back to where we have come from. Perhaps it is that the Act has been drafted unnecessarily widely if it is not the intention of the Government to implement any of the sections which would present the Power Commission with such a conflict. It may well be better to delete such sections from this Act and, in the future, if the Government feels it desirable to enter into the electric power field as an owner, it could enact legislation which would set up a separate Crown corporation to nationalize the power industry.

It is further submitted that there should be a division between the regulatory function and the ownership function to ensure that the principles of Canadian justice are adhered to and that the public will not, in any sense, feel that there is any conflict of interest in this area by the Power Commission. Justice must be done and it must appear to be done. The Honourable Mr. McRuer alludes to the criticism that the Ontario Hydro-Electric Power Commission is subject to in the area of expropriation at p. 980 - 1 of the Inquiry:

"The nature of the person or body on whom the power of expropriation is to be conferred should always be a matter of jealous attention. The less responsible to public opinion a particular body may be, the more reluctance should be shown in conferring the power of expropriation on it. Non-elected bodies, such as agricultural societies, conservation authorities, the Liquor Control Board, the Hydro-Electric Power



Commission of Ontario, and Universities, may be conscious of public opinion to some extent, but they are remote from control by public opinion in a political and democratic sense.

While the exercise of the power of such bodies as the Hydro-Electric Power Commission and the Niagara Parks Commission is subject to the approval of the Lieutenant Governor in Council, they themselves formulate their own expropriation policies and the approval tends to be a matter of course. Where expropriation authorities are not responsible politically for their decision, as Ministers of the Crown and Municipal Councils are, the existence of their powers of expropriation is a much greater encroachment on civil rights than is the case where the powers are held by politically responsible authorities."

Turning now to the proposed Act, the following is an analysis of some of the more pertinent provisions which may give rise to the question of impartiality.

Section 6 states: "The Commission may, and at the request of the Lieutenant Governor in Council shall, at such places, at such times and in such manner as seems advisable to it, make inquiries into any matter or thing in relation to the production, transmission or distribution of power."

Section 7 gives the Commission all the powers of a Commissioner appointed under The Public Inquiries Act. It is to be noted that S. 6 allows the Commission to conduct an inquiry at its own initiative and does not specify as to whom a report should be made in respect of its inquiry. Further, S. 9 (2) allows the Commission to make its own rules governing the Rules of Practice and Procedure applicable to its hearings and investigations. This is re-enforced by S. 54 (b) which allows the Commission to make regulations respecting the conduct of hearings and inquiries by it and the Rules of Procedure therefor. However, the principle of *audi alterem partem* does not seem to be strictly adhered to in respect of the Power Commission's judicial role in its regulatory function. The only definite provision for this would appear to be section 36 (1) which provides for the giving notice to and the hearing of parties interested in respect of the authority of the Power Commission



to require electric utility owners to make alterations, extensions and inter-connections. A general provision is as stated in Section 55:

“No order requiring the doing of any act that will result in any expenses, loss or deprivation to the owner of an electric utility or to any local authority or other person shall be made by the Commission without due notice and full opportunity to be heard at a public hearing of the Commission.”

It is submitted that S. 55 is not of as general application as it would appear to be at first glance. Firstly, a considerable amount of the authority given to the Power Commission involves the applications for various rights, licences and permits (see S. 35 in respect of approvals for designated service areas, S. 37 as to the discontinuance of the operation of an electric utility, S. 38 as to the permits required to construct transmission lines) which would not involve “the doing of any act that will result in any expenses, loss or deprivation.” Secondly, it is submitted that the phrase “expenses, loss or deprivation” is not subject to a ready and clearly understood definition.

Section 16 allows the Commission, upon the authorization of the cabinet, to become deeply involved as an interested party in the power field in Alberta. Not only may it purchase an electric utility, not only is it given a wide range of expropriation, but it is also given the power to require any electric utility owner producing, transmitting or distributing power to furnish either to the Commission or as directed by the Commission so much of that power as is considered necessary by the Commission. It is submitted that this potential deep involvement in the field of electric power is completely deleterious to its position as a regulator under Part 2 of the Act. Upon each application under S. 33 (approval to construct power plants), S. 35 (approval as to designated service areas), S. 36 (authority to require the electric utility owners to make alterations, extensions and inter-connections), S. 37 (authority to discontinue the operation of an electric utility) and S. 38 (permit for the construction of transmission lines), the Power Commission, through its members sitting as a regulatory tribunal, must, consciously or subconsciously, consider its established position as a power generator, transmitter, distributor or director, or if it is not practising in these fields as

yet, it must consider what its position may be in the future in these fields.

#### RECOMMENDATIONS:

1. The intent and policy of the draft Bill should be reviewed in respect of what is wished to be accomplished with the passage of such Act. It may well be that the Bill is drafted as widely as possible as a target for discussion.
2. If it is the intention of the Legislature to nationalize the electric utility industry in Alberta, this should be clearly stated as an intent of the legislation. Otherwise uncertainty will hang over the power industry of Alberta.
3. If the Province of Alberta is to become involved as an interested party in the generation, transmission, distribution or direction of power, it should set up a separate corporate entity to fulfill such functions. This separate corporate entity would be regulated by an independent tribunal charged with the regulation of all like bodies within the Province. It is only by such method of division that the taint of bias may be avoided.
4. If the Power Commission is not to become involved in the operational aspects of power in the near future, operational references should be deleted until such time as it is decided that the Province should involve itself in such operations.

6. "Should there be a right of appeal from decisions of the Commission and, if so, are the grounds for such appeals adequate as presently set out in the draft legislation."

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The present trend of public opinion is that interested parties should have a right to a full and adequate hearing when rights or privileges are being affected and that there should be full allowance for appeals. Coupled with this feeling is the wisdom of having public reviews in the public interest to amend, alter, vary or rescind certain rights or privileges. This question of review is of extreme importance in the electric power field as it is not reasonable to attempt to fix positions for all time in an industry which is fluid and dynamic. It is also submitted that regulation in this field should stress the full participation of the various interested parties so that when decisions are made, they can be made without drastically interfering with or impeding other power and municipal programs.

It is submitted that improvement can be made in respect of the hearing (and consultative) procedure and appeal provisions. The procedural details for the hearings and consultations may be left to be worked out among all the parties for publication in the regulations, but it is of vital importance to establish the substantive rights of the parties in questions of hearings, consultations and appeals. It will be appreciated that what the Commission does in respect of one party will naturally affect the positions of all other interested parties.

The proposed general provisions in this respect are as follows:

"S.61 (1) Subject to subsection (2), upon a question of jurisdiction or upon a question of law, an appeal lies from the Commission to the Appellate Division of the Supreme Court of Alberta.

"(2) Leave to appeal shall be obtained from a judge of the Appellate Division upon application made within one month after the making of the order, decision, rule or regulation sought to be appealed from, or within such further time as



the judge under special circumstances may allow, and upon notice to the parties and to the Commission, and upon hearing such of them as appear and desire to be heard, and the costs of the application are in the decision of the judge.

“(10) Except as otherwise provided in this Act, every decision or order of the Commission is final.”

It is submitted that it would be of value to have the Commission give detailed reasons, if requested by any interested party, for any order, decision, rule or regulation that it gave. Secondly, there would be merit in having an appeal provision to the entire Commission from any decision made by a single member or double member board wherein an applicant could resubmit its case in view of the published reasons. Thirdly, the Commission should have the jurisdiction to review, amend, alter, vary or rescind any of its decisions.

The provisions for appeal otherwise than through S. 61 appear to be singularly lacking. A peculiar exception to this attitude is found in S. 40 in respect of transmission line permits.

“S. 40 (3) A decision with respect to an application for a permit or an exemption order under subsection (5) of Section 38 is final and not subject to appeal except as provided in subsection (4).

“(4) Where the Chairman of the Commission refuses to grant a permit or an exemption order under subsection (5) of Section 38, the applicant may appeal the decision to the Commission in accordance with the regulations.”

Unfortunately, the regulations for the proposed Act have not been made and thus it is impossible to comment upon them. It is peculiar that this section should single out the Chairman as the entity from which an appeal can be taken as the application would appear to be made to the “Commission”. S. 9 (3) allows for the delegation of powers and functions of the Commission to the Chairman if the Commission so delegates. But query, does S. 40 imply that the Power Commission will, in fact, be operated and run by one individual – the Chairman and that the permissive delegation envisaged



by S. 9 (3) will not be permissive but, in practice, mandatory to the functioning of the Commission.

The explicit hearing provisions would appear to be lacking in full protection of interested parties.

“S. 55 No order requiring the doing of any act that will result in any expenses, loss or deprivation to the owner of an electric utility or to any local authority or other person shall be made by the Commission without due notice and full opportunity to be heard at a public hearing of the Commission.”

It is submitted that many of the powers of the Commission which would seriously affect interested parties do not require “the doing of any act” by such interested parties or others, but, in fact, prevent “the doing of any act”. Secondly, the notice provision would appear to be difficult, if not, impossible to comply with. A second hearing provision is that in respect of the specific authority of the Commission to refuse electric utility owners to make alterations, extensions and interconnections.

“S. 36 (1) The Commission, either upon its own initiative or upon complaint in writing, may by order in writing, which shall be made after giving notice to and hearing the parties interested, require an owner of an electric utility.....”

This section is reasonable in its intent to give a hearing on such a matter, but it leaves the question unanswered as to why this section, out of all the possible powers of the Commission, is singled out for an explicit hearing. Why should not this grant of a hearing apply to all powers exercised by the Power Commission. For example, as it stands now in the proposed act, no electric utility owner shall supply power in any area without the approval of the Commission. Evidently, this section envisages a written application be made to the Commission, but there is no provision for such a vitally interested party as the municipal government body affected to make a submission, nor would it seem that the electric utility owner would be able to assist the Commission in arriving at a final decision.

## VARIOUS PROVISIONS

### (a) INVESTIGATION AND INQUIRIES (S. 6-8, 12):

Allowing the Commission such powers in such context raises a very thorny problem. There are frequent criticisms of such public inquiries in that matters are said to be pre-decided by the findings of such investigation. However, such investigations are usually defended by the proposition that, in theory, no rights of the individuals or parties interested are decided at all or decided finally. Consider the Power Commission's uneasy position where, in fact, it is given considerable discretion which would not appear to be subject to judicial review. It is axiomatic that information derived from such investigations will be used in the final determination of the rights of the parties interested. Such a conclusion should be avoided especially when the Commission is not limited in the type of evidence it considers.

### (b) OPERATION OF UTILITIES BY THE COMMISSION (S. 16):

It appears that S. 16 is intended to give to the Cabinet, power at any time to determine that the Commission should take over, in whole or in part, production, transmission, and distribution of power throughout Alberta. S. 17 indicates that due compensation is to be paid where the Commission exercises any of its powers of expropriation under S. 16 to any person owning or having an interest in the property expropriated (Query whether a municipality is a person within the definition.) Although, the exercise of any power under S. 16 may be confiscatory, it is clear that it would not always be an expropriation, especially as the term "expropriation" is explicitly used in some instances in subsections of S. 16. It is submitted that many of the rights affected by powers under S. 16 would be neither expropriation of land under the Expropriation Procedures Act (under which the appeal provisions of S. 52 would appear adequate) or of personal property (to which Section 17 to 21 of the Expropriations Procedures Act apply *mutatis mutandis*, under which it would not appear that the appeal provisions of S. 52 are applicable). It would also not be apparent on its face that the provision of power to the Power Commission under S. 16 (1) (c) (i) would be the interchange of power to "any other owner of an electric utility" so as to bring the determination of "compensation", if any, within S. 36 (2). It should be emphasized with respect to S. 36 (2) that this does not set any

limits to the terms or conditions of compensation nor to the basic requirements that a power utility should serve the needs of its direct customers first.

S. 16 would allow the Commission to cancel the special franchise granted to any private utility when the Commission acquires *any* works for distribution of power in a municipality. It should be noted that the Commission does not have to acquire the private utility's works in total or in part and it is submitted that even the hearing provisions of S. 55 would be inapplicable as the cancellation of the special franchise would not involve any interested party in the doing of any act.

**(c) REGULATION OF POWER PLANTS (S. 33-34):**

The Commission may refuse permission to any electric utility owner to alter or add to the power plant if the result of so doing would increase or decrease the generative capacity of the plant. It may further determine the size of any alteration or addition and require interconnection with any other power system. There are no guidelines set out for the Commission to follow in granting or refusing permission except that the terms and conditions shall be such "as it considers necessary or desirable." These powers can have deleterious results. For example, if a utility owner constructed distribution and transmission lines in the expectation that recovery of costs and profit will only be realized from increased future demand and that such increased demand will be economically met by increased plant capacity, it does not appear reasonable that the increased demand must be met by the purchase of power rather than by the plant expansion. On the other hand, if the Commission grants approval conditional upon construction of a larger plant than is required and the interconnection of it with another system, an unnecessary burden of capital costs could be imposed on the building owner, especially as the Commission can dictate the terms of such interchange of power.

It should also be noted that the Commission is given extremely wide power under S. 34 (3) wherein it "may, from time to time, add to or alter the terms and conditions imposed"



on the building of a power plant. Such a provision, if exercised, could result in very arduous, if not impossible, circumstances for the power utility owner.

It is submitted since the power may be exercised in an arbitrary manner, any appeal provision would simply replace one discretion with another or the original discretion may be simply reinforced. Some limit should be placed upon the exercise of such powers and the operation by the Commission between such limits would be a condition of its jurisdiction.

**(d) SUPPLY AND DISTRIBUTION OF POWER (S. 35):**

This provision allows the Commission to determine “designated service areas” as they exist at the commencement of the Act and to approve further areas. The draft Bill does not appear to anticipate orders to delete lands from such designated service areas; in fact, there is no general provision for amendment, variation, alteration, termination, deletion or periodic review of such designations.

It is recommended that any deletion from the designated service areas, without cause, but prior to the time limit imposed (as where it would be more advantageous to have one utility system service the area rather than the present one or where a municipality has annexed land in a different service area), should be subject to negotiated compensation between the parties. Failing negotiated agreement, the parties could achieve final settlement under The Arbitrations Act.

**(e) INTERCONNECTIONS (S. 36):**

This section gives the Commission power to compel expansion of a system or the entering into of contracts for the sale of power to another utility owner for which the draft gives no right of appeal. It is submitted that there should be an appeal by the utility owners to the Cabinet, although the best protection for a municipality could be the inclusion of a provision that no order shall have any effect unless it has obtained the approval of the municipal council or of the ratepayers involved.



**(f) DISCONTINUANCE OF PLANT AND TRANSMISSION LINES (S. 37):**

This section would not appear to be subject to either a hearing or appeal. As such it is subject to the general criticism contained herein.

**(g) TRANSMISSION LINES (S. 38-41):**

This would be of little practical concern to municipal systems, as it would seem that "transmission lines" within a municipality would be exempted. However, the comments as to hearing and appeals apply in general. It is interesting to note that S. 40 (2) states: "The decision of the Commission to cancel, suspend or amend a permit under this Section is final and there is no appeal therefrom" as this would appear to be an odd provision to single out. Note, however, that the definition of "transmission line" is so broad as to include a distribution line (S. 2(t)).

**(h) ACQUISITION OF LAND (S. 42-47):**

These sections do not appear to concern municipalities who would continue to expropriate under The Municipal Government Act.

**RECOMMENDATIONS:**

1. Provisions for hearings, consultations and appeals should be made wider so that when rights are affected, they may be fully protected.
2. Limitations should be imposed upon powers of the Commission which go to jurisdiction.
3. Compensation should be paid whenever rights are adversely affected by an act of the Commission.
4. The Commission should give written, detailed reasons for any decisions, rules, orders or regulations made by it.
5. Any such decisions, rules, orders, regulations or approvals should be subject to amendment, variation, alteration, rescission, review and termination.



7. “Should there be improved provisions for franchise renewals and if so, what?”

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The existing provisions for franchise renewals are contained in Section 271 (2) of The Municipal Government Act and have been commented upon in connection with question 2 (b). Similar provisions are usually contained in the franchise agreements themselves.

Upon the expiry of a franchise, the same may be renewed or the municipality may elect to purchase the system, or failing either renewal or purchase, the subject matter of the contract under certain conditions comes to an end. The later possibility was in issue in the cases of *Weekes vs. Vegreville* IX W.W.R. 165 and *in re Town of Wainwright and Wainwright Gas Company Limited* 1936 3 W.W.R. 49. The purchase of a system in a case where the utility and the municipality could not agree upon the price was discussed in the case of the *City of Grande Prairie and Northland Utilities Ltd.* discussed elsewhere in this brief. Difficulties can, however, arise in cases where both the utility and the municipality wish to renew the franchise but agreement cannot be reached as to the exact terms of such renewal. It may be advantageous in such cases if provision is made whereby, with the consent of both the utility and the municipality, the terms of renewal could be submitted to the Public Utilities Board for determination.





8. "The feasibility of permitting a municipality to levy a tax on power supplied by a private utility in an area annexed to the municipality as compensation for loss of revenue which the municipality might have received through sale of power in that area."

\* \* \* \* \*

Under The Municipal Government Act, S.A. 1968, C. 68, the scope of a municipality to levy a tax upon power supplied by a private utility would appear to be both legally and practically limited. It is assumed in the following analysis that the "tax on power" referred to by this question was intended to be the measure of such tax and not the method of imposition of the tax, as it is submitted that the former would involve the municipality in a direct tax of the power consumers. Such power does not appear to be delegated to the municipalities by the Province under the Act.

From a practical standpoint, it would appear undesirable from the viewpoint of the municipality and the private utility concerned and unwanted from the viewpoint of the power consumers that an extra tax be imposed on the private utility. The magnitudes of the sums that would have to be involved would be extremely large; consider the tax contribution that would have to be made by a private utility if it served The City of Edmonton rather than Edmonton Power. The contributions to the general revenue fund (excluding the property tax levy) were approximately \$ 6 million in 1967. Consider the impact on the present rates of the private utility (which would have to keep its same profit margins) if these contributions were added on as they would be by being capitalized into the rate base. Such an increase in rates could not be construed to be in the public interest.

Assuming that such a tax were levied upon the private utility, how would such a tax be implemented. It is submitted that there are two general provisions in The Municipal Government Act which would cover the situation, neither of which is satisfactory:

- (a) a gross revenue tax on the special franchise under S. 272
- (b) a licence fee under S. 214.

#### GROSS REVENUE TAX UNDER S. 272

S. 272 states:

“S. 272 (1): A municipality may enter into an agreement with a holder of a special franchise whereby the municipality accepts payment of a percentage of the gross revenue of the special franchise from such holder in lieu of taxing the special franchise, lands, improvements, pipe lines, works and transmission lines, machinery, equipment and apparatus belonging to and used by the special franchise holder in the operation of such special franchise.

(2) The percentage of the gross revenue payable to the municipality may be of a fixed percentage or may be of different percentages for different classes of consumers.

(3) The provisions of The Municipal Taxation Act shall not be construed so as to abrogate the conditions of any subsisting special franchise agreement.”

Note that this provision only becomes applicable if the position of the “permissive order” becomes regularized. If the private utility is allowed to continue to serve annexed parts of a municipality under the colour of right contained in a permissive order, then a gross revenue tax of the special franchise is, by definition, impossible.

Secondly, S. 272 (1) states that the gross revenue tax can be imposed only in lieu of the property tax levy. Thus what the municipality gains on the one hand, it is letting slip from the other. As well, it could be arguable that such a gross revenue tax would have to be reasonably limited to that percentage or percentages which would produce approximately the same amount of revenue as would the property tax levy. An example of the inadequacy of such a tax contribution is apparent when one examines the Edmonton Power example where the property tax levy is extremely small when compared with the total contribution to the City’s Treasury.

It would appear that the approval of the Public Utilities Board to any such arrangement would be required in respect of any prospective special franchise holder by virtue of S. 15 (7) of The Municipal Taxation Act, S.A. 1967, C. 54.

#### LICENCE FEE UNDER S. 214

S. 213 and S. 214 state:

“S. 213 The council may control and regulate all businesses carried on within the municipality including the manner of operation, the nature of operation and the location thereof, and may license any or all such businesses,

- (a) whether or not the business is mentioned elsewhere in this Act, and
- (b) whether or not the business has a business premises within the municipality.”

“S. 214 (1) The council may by by-law do all things with respect to the regulation of any business or industry including the licensing thereof, the restriction and limitation of its operations and any other matter considered necessary with respect to such businesses or industry including the right to impose a penalty and to prohibit the carrying on of any business or industry without a licence.

(2) Such power extends within the municipality to persons who carry on any business or industry partly within and partly outside the municipality.

(3) A licence fee may be in the nature of a reasonable tax for the privilege conferred by the licence or for the purpose of raising revenue and may be computed in any manner accepted by the council.

(4) In taxing a licence fee the council shall, where applicable, have regard for the business tax payable by similar businesses in the municipality.....”

Middleton J. in *Re Foster and Township of Raleigh*, (1910) 22 OLR 26 affirmed (1910) 22 OLR 342, stated in a billiard hall licensing case at p. 29:



“When the Province delegated to the municipality the power to make laws regarding ‘licensing’, and also the express power to fix a licence fee, without any restriction or limitation, it must be taken to have handed over to the municipality the full power conferred by the section quoted – the right to exact a licence fee for raising a revenue for municipal purposes.... When it has been deemed wise to limit the amount to be charged as a licence fee, this limitation has been expressly made. When no limit, the discretion of the council is the only guide, subject to the qualification above indicated, that the fee must be honestly imposed as a licence fee, and not with a view to prohibiting.”

That a licence fee does not have to be tied to the cost of service or policing regulation given by the municipality was indicated in the *Foster* case and confirmed in *Montreal Abattoirs Limited v. The City of Montreal*, 1926 SCR 60.

What is the position of the municipalities of Alberta under the licensing section of The Municipal Government Act. By general law, the licence fee must not be so high as to amount to prohibition. Secondly, S. 214 (3) indicates that the council is limited to imposing a “reasonable tax”. Thirdly, S. 214 (4) dictates that the council shall have regard to the business tax payable by similar businesses in the municipality. These questions are all questions of fact to be decided upon the instances of every case; however, it would appear inconceivable that substantial amounts of revenue could be raised under the licensing section which would compensate the municipalities for lost revenues that they could have earned themselves. It would appear that the language of the section would place a low ceiling upon any payments to the municipalities.

## RECOMMENDATIONS

1. As a practical matter it would be more acceptable if the municipality were allowed to earn such revenues, rather than to receive payments from the private utilities. Such payments would be akin to welfare payments and would merely increase the ultimate burden of the rates upon the



power consumer.

2. There appear to be legal difficulties under the taxation provisions of The Municipal Government Act in the collection of such a tax. If a gross revenue tax were able to be imposed, the municipality would have to give up its revenue tax. If a licence fee were exacted, it is doubtful if more than a modest sum could be raised. There are similar doubts as to the amounts that could be raised under a gross revenue tax.
3. Such a tax should only be accepted by the municipalities as a last resort and poor substitute in lieu of the municipality earning the revenues itself. The acceptance of such a tax would only be an attempt to salvage a small benefit from a disastrous situation. If the municipalities are denied their rights to supply power to the extent of their corporate boundaries, then it would be advisable to amend The Municipal Government Act to give the municipalities clear legislative authority to impose such a tax, when its form is agreed upon among the parties. Consideration would have to be given to the constitutional question of the jurisdiction of the municipalities to levy a tax on power — it would have to be a direct tax.
4. Finally, it must be emphasized once again that the municipality be allowed to expand its power boundaries to the extent of its corporate boundaries. This is the only feasible solution to the situation and not the position that the municipality tax a private utility in such annexed area.



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*COMMENTS ON THE DRAFT BILL*





## COMMENTS ON THE DRAFT BILL

The following comments are submitted as constructive criticism in respect of the draft Bill re The Power Commission Act. Many of the Sections have been examined in detail in the previous material respecting the legal aspects of the questions posed. Therefore the sections mentioned in this chapter will be only briefly examined. Some of these points could be solved by amendments to the draft; other points require an overall view of the situation and reconstruction in depth. The whole concepts as expressed in the discussion draft should be fully and carefully restudied and reconsidered. It is most undesirable, and probably impossible, to do a patching job on this draft Bill. The ramifications are too great and too interwoven to allow a patching operation.

The Act gives the Commission, upon its own authority, jurisdiction to make regulations covering several subject matters. These regulations are not available for examination or review. This is an unfortunate situation as the Act indicates that there are matters of considerable importance which will be governed by regulation. This violates what is accepted as a wholly desirable principle, that it is unsound practice to legislate by regulation. If a subject matter is one of important legislative effect and nature, it properly should be provided for in the primary legislation. As well, there are many instances where the Commission is given authority to grant permission in respect of construction of power plants, transmission lines, service areas, etc. In general, there are no guidelines for the Commission to follow and there would not appear to be any provision for consultative action between the power utility owner and the Commission both prior to and during the application.

In some provisions of the Act, too much is left to the imagination and ingenuity of such persons as at any particular time and for their own particular purposes, may be interpreting such provisions. Such inadequate sections obviously require more comprehensive draftmanship and clarified expression with the main objective of the elimination of what could become insoluble disputes.

The following section-by-section review is not intended to be exclusive.

1. Section 2 (e) should be limited to “within the Province of Alberta” to avoid any dispute over extraterritorial effect that the present definition may have.
2. Section 2 (1) contains the definition of “owner of an electric utility” but such definition would not include the Power Commission itself when it went into the operational field. Secondly, this definition should be expanded to recognize that a municipal utilities commission would fall within the definition of local authority.
3. Section 2 (s) defines “special franchise” but there is no definition of “permissive order”. However, the note to Section 35 indicates:

“Commission may grant approvals as to designated service areas. These approvals, or “ permissive orders ” as they are commonly called are presently made by The Public Utilities Board.”

The permissive orders have been the subject of a great deal of confusion and it does not seem that the definition section of this Act of Section 35 does anything to clear this confusion.

4. Section 2 (t) defines “transmission lines” in such a manner that it would include the smallest part of a distribution line. Transmission lines and distribution lines are two separate entities with different characteristics. Note that Section 2 (u) recognizes this distinction.
5. Section 4 deals with the various restrictions on Commission members to prevent a conflict of interest. It is submitted that a section more widely cast and in more general terms would be more desirable. It is submitted that it is better to produce something of a more general nature expressive of the real intent to eliminate conflict of interest, leaving the facts of each particular case to determine the answer. The present provisions are faulty in that the restriction should cover a security issued by an electric utility owner *operating* in Alberta. Secondly, the restriction should be case so as to cover both municipal and private utility owners instead of just the private owners. Thirdly, the section should catch any holdings in a company which has a substantial interest in an electric utility, including contracts with such electric utilities.
6. Section 5: Consideration should be given to taking employees of the Commission out of the Provincial Civil Service.

7. Section 6 would allow the Commission on its own initiative, or at the request of the Cabinet, to make inquiries, but it does not specify towards what objectives or for whom. This section and the following sections relating to hearings and investigations should be carefully studied, redrafted and co-ordinated with those parts of the Act relating to the Commission's regulatory functions.
8. Section 9 (3) provides that the chairman is the chief executive officer of the Commission. The conflict between the Commission's regulatory function and its operative function is once again emphasized. The exercise of the executive function by the chairman who at the same time would be the head of the policy formulating and regulating body, is not consistent with the best and most efficient operating practices.
9. Section 9 (5) allows the delegation of powers and functions that are of a routine nature. It is submitted that matters of very great importance involving a great deal of judgment may, because of the frequency with which they occur, become of a "routine" nature. Secondly, the chairman, by Section 9 (3) is to perform "the Administrative functions of the Commission under this part". However, Section 40 (4) would appear to imply that the chairman would perform all functions of the Commission, be they under Part I or Part II and be they "administrative" or judicial or quasi-judicial. Certainly there must be some explanation and examination of the functions of the Commission so that all interested parties are in agreement as to the meaning of the words used.
10. Section 12 should make provision for the contesting of evidence submitted by affidavit or by report by the various parties involved in a hearing and/or an investigation.
11. Section 14 could be construed as an attempt to oust the jurisdiction of the Courts in respect of the assessment of costs against the Commission if the Commission were a party to legal appeal proceedings arising from an application.
12. Section 16 (1) should be carefully studied in respect of the need for the authority of the Cabinet in the performance of these functions. Is an authorizing Order-in-Council necessary or desirable in all instances. Consider the problem of obtaining appropriate authorizing Orders-in-Council "to do any other thing incidental to or in connection with the carrying out of the provisions of this subsection". Secondly, Section 16 should be qualified to limit the Commission to the doing of such things as may be "incidental to and necessary for the purposes of the Commission."



13. Section 16 (2) envisages action for which there should be more clarification. Firstly, the section would abrogate the democratic rights of the municipal voters who had previously approved of the special franchise. Secondly, it is unclear whether the cancellation of this special franchise would constitute an expropriation entitling the private company to compensation. Thirdly, this would allow the cancellation of a special franchise for an entire municipality even if the works acquired by the Commission were for the distribution of power to a small part of the municipality. Fourthly, it is unclear as to what rights the private company would have after its special franchise was cancelled.

14. Section 17 would appear to be unclear as to exactly what compensation would be allowed upon expropriation. Secondly, Section 16 gives the Commission authority to do many things, some of which are explicitly defined as “expropriation”, although there may be many other confiscatory features to Section 16. Section 17 should clearly allow compensation for any confiscatory action.

15. Section 17 (2): Does this provision mean that the Company described shall be immune from expropriation or other action under Section 16, or that expropriation would carry with it the rights of the company under its federal licences and enabling authorities, or that expropriation is subject to such rights and privileges which the company enjoys thereunder with respect to expropriation or the exercise of such other action under Section 16. It appears very peculiar to have an Act drafted so as to appear to be an act of general application, when, in fact, the Act specifically exempts the largest power entity which supplies more than half the power in the province.

16. Section 19 (2) would not give the full protection of the Expropriation Procedures Act to a person expropriated of personal property. Consider the appeal ramifications.

17. Sections 20-28: In the world of today’s money markets, the borrowing powers of the Commission appear to be lacking in some respects and not clear in others. The omissions and faults are too numerous to mention individually. The examples range from the exclusions of a guarantee by the Province of any premium that may be applicable to the undefined “purposes of the Commission” listed by Section 23. Incidentally, the drafting of a fuller section defining the purposes of the Commission would emphasize the conflict between the operating and regulatory functions of the Commission.



Sections 33-41 inclusive of Part II of the Act dealing with power plant approvals, supply and distribution of power and transmission line permits together create a formidable authority for the exercise by the Commission of its regulatory functions. This authority is almost limitless and inevitably would create an atmosphere of unacceptable uncertainty for all entities engaged in the electric utility business. It is open to the abuses of decisions without published reasons, the denial of the democratic process, the exercise of the characteristics of ownership without responsibility, undesirable pressures and influences, and the denial of effective appeal. A number of the provisions are unacceptably obscure and are open to conflicting interpretations. Provision is made for the exemption of utility owners from requirements respecting transmission line and power plant permits with no provision for the grounds, reasons, or purposes of the exemption. By implication, regulations may be provided for specific purposes and there is not clear and apparent authority for the making of such regulations. Provision is made for the imposition of conditions to which various approvals may be subject, without any limitation on the characteristics or nature of these conditions.

The most objectionable feature of these regulatory functions lies in the area of the supply and distribution of power. As the Act is presently drafted, all existing designated service areas are frozen and there is no provision under which the Commission can alter, adjust or transfer those existing designated service areas or cancel orders respecting them. The confusion respecting the permissive orders under Section 97 of The Public Utilities Board Act is continued.

Part II visualizes complete control by the Commission of all power facilities within the province. The Act as presently proposed is not conducive to the co-ordination and timing required in the power industry. Under the proposed set up, the Commission envisages that it will be able to choose between several alternatives when, in fact, the procedure set up is that of individual applications. If a fair hearing is to be given to all the parties and if the Power Commission is to decide the best alternative, then necessarily, a very long delay must ensue to allow the other parties to present such alternatives.

18. Section 34 (3) allows the Commission to add to or alter the terms and conditions imposed by it under this section. How can a utility owner operate in certainty that he will not be involved in great expense or delay by subsequent action by the Commission.
19. Section 34 (4) should allow the utility owner to retain the approval upon compliance, if the non-compliance were the fault of an independent contractor.
20. Section 35 is extremely imprecise in its definitions and terms. For example, the definition of “supply” in Section 35 (1) is unclear as to whether it means “generate, transmit and distribute” or “generate” or “distribute”. The heading of Division 2: “Supply and Distribution of Power” adds to this confusion.
21. Section 35 (1) gives the Commission jurisdiction overlapping the responsibility already given to the Municipal Council and the Public Utilities Board.
22. An example of the imprecision contained within the Act is that the “land or area” is not defined nor are any guidelines given as to how large this “land or area” would be. The Section is presently so widely drafted that the extension of electrical service to the square mile in the extreme southeast corner of Alberta could be considered pertinent in the designation of a service area to one hundred thousand square miles of northern Alberta or vice versa.
23. Section 35 (6) provides for the Commission determining the designated service areas of each utility owner as of the commencement of the Act. Depending upon the determination made, this would permit a situation in which two electric utility owners had overlapping designated service areas in that in some cases certain “areas” are served with power from two electric utilities. Consider also the ramifications of the Jasper Place example wherein Calgary Power Ltd. has agreed to turn over its facilities to the City in 1969 at the end of its franchise. As well, no consideration seems to be given to the question of the supply of power by interconnection of the various utility systems, both as to designation under Section 35 and as to approval under Sections 35-36.
24. Section 36 gives the Commission, in effect, ownership of the electric utilities in the province without responsibility and without the contribution of any moneys to purchase such ownership. The power granted to the Commission under Section 36 may be completely confiscatory.

25. Sections 38-41 emphasize the need for a clearer definition of “transmission line” in Section 2 (t).
26. Section 54 would not appear to give the Commission authority to make regulations involving the various exemptions contained within the Act which are prescribed to be dealt within the regulations. Secondly, it must be emphasized that it is impossible to give a full and detailed analysis of the Act without knowing the implications of regulations which have, as yet, not been made.
27. Section 55 indicates that the “other person” shall get due notice. It may be impossible to determine what other persons are involved in such a situation so as to give them due notice. Notice by a newspaper advertisement should be spelled out to protect the Commission.
28. Sections 54 and 56 should comprehend that the system of accounting should be “substantially uniform”.
29. Section 60 allows the Supreme Court to grant an injunction in respect of various matters, but it does not spell out that the Court should also be able to give mandamus prohibition or declaratory relief.
30. Section 61 gives the appeal procedure with the notation that it is identical to appeals from decisions of the Public Utilities Board. Firstly, it is submitted that the appeal provisions should be widened. Secondly, the identity with the Public Utilities Board appeal procedure is not a guarantee that this is the best procedure in this respect. Thirdly, the policy enunciated by Section 61 (10) that every decision or order of the commission is final except in respect of a question of jurisdiction or a question of law is completely contrary to our established jurisprudence in that the Commission has a definite interest in the electric utilities in Alberta both as a regulator and as a “owner”. There is patently on the face of this Act a conflict of interest for the Commission. It should be noted that The Public Utilities Board does not face the same conflict. It should also be noted that the Act gives the Commission such wide powers that an appeal upon jurisdiction may be completely farcical.

The previous analysis has been intended to merely indicate some of the weaknesses and faults in the draft Bill, without being exhaustive. It is our respectful submission that the overall intent of the Act and its ramifications be carefully studied before any action is taken. Of particular importance, is an analysis of the functions and responsibilities that the Power Commission should

engage itself in. Once having determined these questions, adequate and full power should be given to the Commission to fulfil such functions and responsibilities but the Commission should not be given unlimited powers.

In conclusion, it is submitted that the definition of an electric utility owner should not include a municipally owned and operated system within the corporate boundaries of the municipality. As illustrated and emphasized in this brief, it is not in the public interest to control or regulate a municipal system under such circumstances.





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